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BARKER, J.

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# EPIDEMICKS,

OR

GENERAL OBSERVATIONS

ON THE

AIR AND DISEASES,

FROM THE YEAR 1740, TO 1777 INCLUSIVE;

AND PARTICULAR ONES

From that Time to the beginning of 1795;

CONTAINING A DESCRIPTION OF

SOME PREPARATORY STATES:

AND OF THE RISE AND PROGRESS OF

A PESTILENTIAL CONSTITUTION.

TO WHICH IS PREFIXED

*A PRELIMINARY DISCOURSE ON SUBLIME SCIENCE:*

WITH OBSERVATIONS ON

The Author's Writings on Divine Subjects.

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By J. BARKER.

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# ERRATA.

PAGE xvi, *line* 9, *for* obſervations *read* obſervation.
47, *line* 10, *for* Thuſus *read* Thaſus.
96, *Note* § *line* 2, *for* criſes *read* criſis.
121, *Note* § *line* 3, *for* laſt year *read* in the year 1793
144, *dele line* 28th.
154, *line* 10, *after* ſiccâ *read* et exæſtuante.
161, *Note* * *line* 4, *for* lengh *read* length.
174, *line* 25, *for* general *read* generally.
175, *line* 10, *for* laſt Summer *read* in the Summer and beginning of Autumn 1793.
182, *Note* † *line* 2, *for* who had *read* having, *and line* 4, *for* who lay *read* lying.

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A

# DISCOURSE

ON

# SUBLIME SCIENCE, AND ITS IMPORTANCE;

AND ON THE PRINCIPLES OF TRUE

## Divine, Political, and alſo Phyſical Knowledge;

WITH REFLECTIONS ON THE AUTHOR's WRITINGS ON THOSE SUBJECTS;

## Alſo on the imperfect and fluctuating ſtate of Learning,

AND THE

## STATE OF ANCIENT AND MODERN PHYSIC.

—o—

THE firſt great object of the mind, the moſt noble of all ſciences, full of knowledge, to exerciſe and increaſe the ſoul's active powers, reſtore to their right ſtate its depraved faculties, inſpire it with true ideas, and bring men back to the uſe of reaſon, and the practice of which is connected with their eſſential intereſts, their welfare and happineſs both here and hereafter, is Divinity, or the truth of the Chriſtian Religion: And the next, that riſing out of and united with it, teaching true policy, and to form right notions of the ſource and nature of temporal authority, productive of obedience to the civil powers. By theſe, bodies of men are firmly linked together, and the bonds of ſociety drawn tight, the rights of individuals ſecured, harmony kept up, and on them, under Providence, depends the peace of the world; as the health and lives of men often do, ſo far at leaſt as ſuch ſecond cauſes are concerned, on the knowledge and practice of true Phyſic. The latter great ſcience indeed, as it regards only the preſent well-being of the body, and the preſervation of life, cannot ſtand in competition with the two former, though the health and lives of men, are things of great moment

and concern. From the full knowledge then, of the great importance of true principles in religion, and right notions of government, and a due conſideration of the great miſchiefs ariſing from diſſentions about civil and religious matters, and the want of faith and obedience, by inſiſting on the former, it has been my earneſt wiſh to have prevented the latter, before I treated at large upon Phyſic.

The firſt treatiſe I dedicated to this uſe, appeared as early as in the year 1772, and hath been followed by ſeveral others. And certainly to have pointed out in times like theſe, what is truth of ſentiment in matters of faith, and openly ſhewn the nature and extent of obedience, ſtands in need of no apology: the mere diffuſing of true knowledge of theſe great ſubjects being, at all times, confeſſedly one of the greateſt benefits a man can beſtow on his fellow-creatures; but eſpecially when mens minds are ſo abroad*, and they are ſo buſy in their enquiries after, and eager in the purſuit of it, though unhappily ſo divided, at the ſame time, in their notions about it. It is impoſſible, indeed, that unity of opinion ſhould exiſt among men in the preſent imperfect ſtate, wherein their views are different, their intereſts claſh, their underſtandings are often led aſtray by falſe ideas, and blinded by prejudice, and their wills biaſſed by the paſſions. And though by reaſon of this, the ſucceſs of my endeavours to inſtill true notions of theſe great ſubjects, and moſt ſublime parts of ſcience, muſt neceſſarily have been imperfect, it does not however repent me that I have endeavoured it; and with the full proſpect before my eyes, of evils that muſt ariſe from the ſpreading of heretical opinions and pernicious tenets, notions ſubverſive of order, and that ſtrike even at the root of Government itſelf, not ſat down ignorantly regardleſs, nor idly meditating on theſe things, but laboured to prevent them. Not ſhut up my knowledge within my own breaſt, but brought it forth long ſince for general uſe, and endeavoured to diffuſe it as far as poſſible, for the univerſal

* The eyes of a Fool, Solomon has well obſerved, are in the ends of the Earth. And without the ſimple perception of truth, no great knowledge is to be attained.

benefit

benefit of mankind. If principles indeed were of no conſequence, and one might with ſafety wholly diſregard or at leaſt paſs ſlightly over them, much of this labour might have been ſpared, as well as ſomewhat be ſaid in excuſe of the wonderful wanderings of the preſent age. But as they are the ſecret ſprings of action, and bad ones are often productive of the greateſt miſchiefs, too great care cannot be taken by writers, and men in general, to implant good ones, and to fix them firmly, and thoſe only in the minds of men.

I wiſh I could ſay that the temper of mens minds had been ſuch that my writings on religion and obedience, which I humbly conceive might have been productive of good, had been as much attended to for our mutual benefit, as ſome others more in vogue, which inſtead of doing good have done much harm. For of ſuch bad conſequence are unſound opinions in Philoſophy, wrong notions of Government, and falſe principles in Religion, that there is no end of the miſchiefs they occaſion. And from including in this ſevere cenſure, I cannot except even the writings of Mr. Locke. For moſt men take, what they call, knowledge upon truſt; and their ſentiments from the opinions of others, whom they look up to as to the ſuppoſed adepts and maſters in ſcience: the truly learned and intelligent indeed know better, and are not to be impoſed on. Nothing however appears to me to have contributed ſo to diſſeminate, and ſpread abroad among the people wild and weak notions, and corrupt ideas of ſcience in general, and the itch of writing, as modern reviews; the legitimate deſcendents of thoſe writings uſhered into the world in the time of Doctor Norris, and Mr. Locke, by a ſet of Gentlemen who took up the name of the Athenian Society, and whom the former moſt pointedly ridicules for impotently attempting, to uſe his own words, "to turn a Conventicle into a Port-Royal, and ſetting up for Virtuoſo's." For my part I never heard of but one great Critic and accurate Judge of ſublime writing: how wonderfully prolifick then muſt our iſland be that can furniſh us with ſo many? If however we muſt have criticiſm, let us have that which

conſiſts of liberal ſentiments and unprejudiced opinions; that which is ſober and ingenuous, that which is pure and genuine; not the wild reveries, and undigeſted notions of infatuated minds, and the effuſions of the ſpirit of party. One would think the dreadful and exemplary ſufferings of a great and long flouriſhing neighbouring nation, by ſetting before our eyes in a ſtrong and even glaring light, the ſad effects of reading bad books, and the horrid conſequences neceſſarily attendant on want of faith and obedience, might at length awaken ſome, if nothing elſe could, from their dream of error, and bring them back again by degrees, to truth and ſoberneſs, which I moſt ſincerely wiſh may be their caſe. If men would hearken to ſound ſenſe, or even to experience, and could read hiſtory with improvement, the people of this nation have not wanted the beſt means of information; for by only turning over the pages of Clarendon's Hiſtory of the Rebellion, againſt Charles the firſt, they may be made fully ſenſible of its hateful nature and ſad conſequences. Reformations are generally only the idle dreams of ignorant or wicked men, and to be good for any thing, muſt begin in thoſe of principles and manners.

But how unfairly ſoever truth in Scripture may have been perverted or reſiſted, and new ways of thinking introduced, by falſely repreſenting thoſe things as corruptions, which were the eſtabliſhed doctrines of the ancient church, or how ignorantly or diſingenuouſly ſoever ſome may have appealed to reaſon, that is no ſufficient cauſe why its friends ſhould ſo depreciate, declaim againſt, and ſet it at nought: which, beſides that, there is no fair reaſoning from the abuſe of any thing againſt the uſe of it, is a mode of argument that is by no means likely to be received in the preſent age. And as there is no ſufficient reaſon for attempting to degrade human nature on the one hand, ſo neither is there for repreſenting the great truths of religion as neither in any meaſure diſcoverable by, nor even agreeable to reaſon on the other. For if this were really the caſe, why were they in ſo peculiar and ſublime a manner, and ſo truly revealed? And if diſcoverable in a ſuf-

a ſufficient degree by ſome, as I can ſpeak from experience for myſelf, that through the help of revelation I know that they are, why may they not with proper aſſiſtance and a due degree of attention be ſo, in ſome meaſure at leaſt, by more? It is true, human reaſonings, through corruption of nature are now very fallible: reaſon however itſelf, the peculiar gift of God to and his image in man, which when defaced, the chriſtian religion was revealed to reſtore, in the divine being, is truth. Inſtead of depreciateing it, that great Divine, Mr. Norris, in his time wrote a book full of the pureſt and moſt ſublime devotion, expreſſly entitled, Reaſon and Religion. And a greater than he diſdained not the uſe of it, but reaſoned with ſuch force before the Roman Governor, of righteouſneſs, temperance, and judgement to come, that Felix trembled. And St. John in his Revelations, in the moſt pathetic terms, pronounces thoſe bleſſed, who underſtand the words of the prophecy of that book, wherein all the ſublime truths of religion are revealed. To cut this matter ſhort then, it appears plainly to me, that, inſtead of flying from the face of reaſon, the better way would be for the friends of true religion, with it on their ſide, to boldly face it out, to fight its enemies with their own weapons, to ſhew them plainly that they have wholly miſtaken the matter, and that right reaſon, that is truth, is in all reſpects, and armed, as it were, at all points, againſt them; which is moſt undoubtedly the caſe, and had men in general abilities in the preſent ſtate, to ſee things in their true light, moſt eaſily to be proved.

And even in this ſtate, the helps afforded chriſtians, are ſo many and great, as muſt convince every ingenuous mind, of want of proper attention to the great truths of religion, and due improvement by them, both in knowledge and virtue. If then, inſtead of following knowledge with true ardor of mind, and the native vigour of the great ancient writers, and tracing out her remote, intricate, and rugged ways, mounting up her ſteep aſcents, and opening new proſpects on the ſublime walks of ſcience, we ſuffer ourſelves to be diverted from our courſe, and deterred

from proceeding, by repreſentations that the tract is either wholly impervious, or the road impaſſable, and perſuaded to turn aſide with others, into bye ways; what can we expect but to be numbered with the common herd, that from want of ability, or the ill direction of it, or through indolence, and want of ſpirit, have failed in the purſuit.

That many do not attain true knowledge in the ſublime ſciences, and very few indeed in an eminent degree, and conſequently not make great proficiency in any of them, the number of the revivers in modern days of perverſe diſputes in divinity, about the nature of Government, and the imperfect and variable ſtate of Phyſic, evidently enough ſhew. And yet upon the underſtanding and due practice of theſe three great branches of ſcience, the health and lives of individuals, their well-being in ſociety, or the happineſs of men both here and hereafter, as I have already obſerved, under Providence eſſentially depend. Hard indeed it is to teach thoſe whoſe underſtandings are blinded, or diſpoſitions are averſe; and imperfections, from which no mortal is exempt, undoubtedly there are, in all human compoſitions: however, excluſive of theſe, I think I can fairly appeal to the teſtimony of my own mind, that it has been my conſtant endeavour in my writings, to add unto the ſtock of ſublime and uſeful knowledge, by a faithful and liberal communication. But if, after all this, men will turn aſide to vain jangling, will receive no inſtruction, nor take any anſwer,— whoſe fault is that? When matters, I ſay, come to that paſs, it is then high time to leave them; ſince it can anſwer no good end, at leaſt can be of no further preſent uſe to write. And, under ſuch circumſtances, every wiſe man will naturally retire, and withdraw himſelf from ſuch a ſtate of things as far as he can.

Before I cloſe theſe obſervations on the importance of true religion, and the neceſſity of civil obedience, ſuffer me once more, to ſhew the nature and principles of both. As to religion then, the firſt great article of the chriſtian faith, and leader of all the reſt, the higheſt point of know-

knowledge which revelation affords, as a principle to direct us, is this, that the Deity is triune. For there can be no redemption without a Redeemer; the higheſt Angel not being equal, much leſs any mere man, to this great office. And though this great truth, becauſe that through the corruption of nature, few minds are now able to riſe up to the contemplation of the divine, is in general to be received on the teſtimony of that revelation, and the belief that God's word is true; without humility enough, founded on a due ſenſe of our own weakneſs of mind and corruption of nature, and the need we ſtand in of a divine Saviour, without humility of mind enough, I ſay, to believe and receive it upon that ground, no man can be a chriſtian. Not that revelation debars any man from underſtanding its own explanation of this great myſtery, ſo far as it does explain it, for it would be highly unreaſonable to ſuppoſe this; and much greater light it does let into it, than is generally apprehended. * Which Mr. Jardine or ſome other of thoſe, who are too full of logic and mathematical learning, which may deny, but can never reach it, to let in faith, if they could be perſuaded in this inſtance, to lay it down, and take up ſimplicity of thought, and poorneſs of ſpirit, perhaps might find; as well as ſome of thoſe ingenuous minds, that ſubmit to divine truth, if they were not drawn off from contemplating this great object, and haply men could fix their eyes ſo ſteadily on it, that they could obſerve it.

If then, this great article be of ſuch high importance, and the very foundation of the chriſtian religion, men ought to be very careful that they do not ſpeak ſlightly of it, much more with infidels reject it, and endeavour to divide things by their nature inſeperably united, modern unitarianiſm being nothing leſs, than an abſolute denial of the truth of it: and it being, in another reſpect, as irrational, erroneous, and heretical to ſet up morality againſt faith,

* See Jardine's Diſcourſes and arguments againſt the Trinity.

as with the Methodiſts faith againſt works; of which latter wild, miſtaken, and heretical opinion the former unfortunately has been the parent. Beſides, ſalvation is not of works, taken in an abſolute ſenſe: they certainly indeed are an indiſpenſibly neceſſary qualification, but not more, for obtaining it, and acceptance through the merits of the mediator. If any thing however will produce true piety, and lead men to the performance of the humble works of righteouſneſs, it muſt be a lively and genuine faith, they being the natural effects of it. Pride, an hateful ſin, that acts ſo imperceptibly, that we frequently know not when we are guilty of it, and ſticks withal ſo cloſe to us, that it never fails to taint even our beſt actions, lies ever lurking at the bottom of ſuch a boaſting morality, as magnifies, and ſets itſelf up againſt faith. This was the caſe with the heathen Philoſophers of old, whoſe pride diſqualified them and rendered them incapable of embracing the Goſpel. And this has alſo been the caſe unfortunately with many others, under the ſame circumſtances, ſince their time.

If weak, miſinformed, and unruly minds, could be perſuaded to lay aſide their habits and ways of thinking, and men brought to look at things with an unprejudiced eye, and in their proper light, and to walk ſteadily in that middle path, wherein truth only lies, if, I ſay, they would think and act as men and reaſonable creatures, not, inſtead of depreciating reaſon in an undue manner with ſome, exalt it too much by ſetting it above revelation on the other, but wiſely ſuffer their minds to be inſtructed by divine truth, they would find that the unitarianiſm, if it may be ſo called, of the primitive chriſtians, is the only true one: not that of Socinus and Doctor Prieſtley, nor that of Emanuel Swedenborg. The early chriſtians however, though they certainly did worſhip the Almighty Father, did it through the Son, by the ſpirit, and ſometimes even paid divine adoration to Chriſt, by calling on his name. Conſequently never thought of denying his ſubſiſtence, and that of the Holy Spirit in the Godhead, by ſetting up the Father

Father alone; nor of denying the exiſtence of two of the ſubſiſtencies in the Deity, after another mode, and endeavouring to confound the truth ſtill more, by ſetting up the Son for the Father. Now if ſcripture declares there are three ſubſiſtencies in the divine Being, as it certainly in effect does, by calling each of them in many places God and Lord, and did no more, would not men, conſcious as they muſt be of their want of powers to comprehend the nature of an infinite Being, act wiſely in acquieſcing and humbly receiving it upon the ſimple teſtimony of truth itſelf, of him who perfectly knows his own nature, which men do not, and cannot lye nor deceive?

However as we unfortunately know this will not always be done, in order to accommodate my own notions, the imperfect glimmerings of reaſon aided by revelation, to the weak conceptions, frailties, and faults of poor ſhort-ſighted and imperfect mortals like myſelf, ſuffer me once more philoſophically, through the help of revelation, to lay down this indiſputable truth, that though God certainly is one, it is impoſſible he ſhould be ſo in the unitarian or ſocinian ſenſe, becauſe the truth is a ſubſiſtence in the divine Being neceſſarily diſtinct from, though in eternal communion with the mind or perſon of the Father; the latter being ſelf-originated and productive, and the former brought eternally into being. And that the Son, the Saviour of the world, calls himſelf this truth, no one need be ignorant. There needs then no farther controverſy about this matter, with perſons open to conviction, this alone being perfectly concluſive both philoſophically and religiouſly upon the ſubject; it being as impoſſible that the ſelf-exiſtent Father, and the truth or his eternal ideas, ſhould be the ſame ſubſiſtence in the divine Being, as that the mind of man and his ideas ſhould be the ſame. But farther, the ſecond ſubſiſtence called by Solomon and other inſpired writers, the wiſdom, the only begotten Son, and the firſt-born of every creature, that is, the great exemplar of all created beings, or archetype of all things, is not only the begotten eſſential truth or wiſdom in the deity, that enlighteneth the mind

of

of every man that cometh into the world, or affordeth all men what true ideas they have, but alſo the infinitely active and almighty word of God, full of divine power, and inheriting as a Son the ſpiritual nature of the Father. On which account our countryman Milton, after ſcripture, introduces the Father, in his Paradiſe loſt, calling the Son "his *word*, his *wiſdom*, and effectual *might*." And Solomon in a ſtrain ſtill more ſublime ſays, "thy almighty word leapt down from heaven, out of thy royal throne, as a fierce man of war into a land of deſtruction, and brought thine unfeigned commandment as a ſharp ſword, and ſtanding up, it filleth all things with death, and it toucheth the heaven but it ſtood upon the earth," the Son being the meſſenger and vicegerent of the Father. And the divine St. John in the beginning of his goſpel declares, that the word was eternal, in the beginning with God, that is coeſſential with the Father, and concerned in the creation of the world: a proof of the divine nature, and ſubſiſtence of the Son in the Godhead, ſufficiently obvious even to a common underſtanding.

Again,— does any one doubt that the light which iſſues from the body of the ſun and pervades the ſolar ſyſtem, is of the ſame nature of that reſident in its luminous body, or that it is diſtinct from it? In like manner the ſpiritual ſubſtance, infinite energy and power, wiſdom, and love of God proceedeth in a third ſubſiſtence, the holy ſpirit, from the central being of him that ſitteth upon the throne in heaven, through the infinity of ſpace, whereby the Deity is omnipreſent; the three ſubſiſtencies being in eternal union and communion with each other, and but one God. But as many are ready enough to cavil, who are not able to teach, ſome may perhaps object againſt taking an image from nature, in order to repreſent and give finite creatures ſome faint ideas of the mode of the exiſtence of the greateſt of all ſpiritual beings. But it is undoubtedly a moſt proper one and peculiarly ſo in this, that God is light, though ſpiritual light; as well as becauſe it gives us ſome imperfect ideas of the proceſſion of the ſpirit from the

the central being of God, and ſheweth that there are natural appearances afforded by their great author, to quicken our belief and reception of this great truth, and even diſtinct ſubſiſtencies of the ſame nature, exiſtent in and proceeding from the ſame natural body, demonſtrative of it. Moſes was inſpired with good ideas of the proceſſion of the ſpirit, who ſays in his deſcription of the creation, that "the ſpirit of God moved upon the face of the waters:" and alſo Solomon, who ſays in the beginning of his book of wiſdom, that "the ſpirit of God filleth the world and he that containeth all things hath knowledge of the voice." And there is no man ſo ignorant, but who has full grounds for belief in, and may alſo form from thence ſome notions, however imperfect, of his omnipreſence by his ſpirit. And ſo much of this great article of a chriſtian's faith, the belief of three ſubſiſtencies in unity in the Godhead.

As to the general nature of Government, and the true principles of obedience to legal power, matters that cannot be too much inſiſted on in the preſent times, give me leave to obſerve, that there is no body of men nor nation upon earth, that is not under ſome kind of Government, not excepting even the ſavage Indians, and inhabitants of the iſlands of the South Sea: and till Governments were inſtituted and ſtates formed, even the families of the antidiluvian and poſtdiluvian world, were governed by their Patriarchs. Every man is ſubject to the Government he is under, from the moment of his birth, and there is no one comes into the world, who is not bound by the law of obedience, to honour and obey his Parents, the executive Powers and laws of his country. To ſay then, that any man is born free from obligation, is an idle conceit, contrary both to hiſtory and experience, a palpable abſurdity, void of all truth; for without Government, no ſociety could ſubſiſt. As to the origin and delegation of power, it can proceed from none but God, who is the only true ſource of it: as is evident in the infliction of puniſhments capital, which have their true ſanction from him. The conſent of the people,

people, indeed, and a diſpoſition to obey their rulers, is abſolutely neceſſary in all good Governments. They may alſo be concerned in public Deliberations, acts of Legiſlation, and in modifying Governments: and in pure Democracies and elective forms, ſome may be even choſen from among them, to be the executive powers. But when theſe ſupreme powers are once ſet up, under whoſe auſpices do they act? Surely not the people's, but God's; even ſuppoſing them to be accountable by the laws to the former, as in Governments not monarchical, may be the caſe. For civil power can have no legitimate origin from thoſe who are born ſubject to the law of obedience, but from ſome other. When they are aggrieved and oppreſſed, the people indeed ſometimes rebel againſt their rulers, but they are accountable to God for it on the one hand, as well as Kings are for the abuſe of power, on the other; and at the ſame time by no means ſure, nor even likely to better their condition by it. For after all, they muſt ſtill fall into the hands of him that governs the world, and ſitteth at the head of all power. And who hath commanded chriſtians to obey their rulers, not only for wrath, but alſo for conſcience ſake. Out of conſcience, I ſay, of the duty they owe to God, how unfaſhionable a tenet ſoever it may be in the preſent age, and let me add, alſo out of prudence. For he that ruleth the kingdoms of the earth, and hath preſided over all from the beginning, is no inactive being that ſits an idle and unconcerned ſpectator, of wickedneſs and diſobedience, but the infinitely, intelligent, omnipreſent and almighty ſupreme director of all human affairs, public as well as private; who, when a people diſregards his admonitions and corrections, and deſpiſes his merciful forbearance and long-ſuffering, moſt infallibly puniſhes ſuch wicked and rebellious nations, by bringing calamities upon their country. Chaſtizing them often, by taking away good Governors from them, and permitting bad ones to rule over them: and ſometimes when they are in a yet worſe ſtate, and a kingdom in a manner, ripe for deſtruction, even turning wicked men looſe, for their mutual puniſhment on one another. And in other caſes and among

among thoſe in a better condition, and whoſe manners are not in general, in ſuch a corrupt and depraved ſtate, for the ſame wiſe reaſons of his providence, endeavouring in mercy to reclaim them by gentler methods, by ſetting up better Princes, and prolonging the lives of good ones.

Theſe are the principles of true obedience, which I treated of long ago, and wiſhed to fix firmly, with the firſt principles of faith, in men's minds for their good. And were not the prejudices of education ſo great, the influence of opinion, and uſual modes of thinking ſo prevalent, the paſſions ſo ſtrong, and had not the various intereſts of men ſuch firm hold upon their minds, that few can diveſt themſelves of, and ſo caſt off the two former, and effectually reſiſt the two latter, as to recover ſimplicity of mind, and get clearneſs of perception enough, to ſee things in their true light, they might perhaps, if well received, properly diffuſed abroad, and duly attended to, with the bleſſing of Providence on their ſide, be productive of ſome benefit.

And now let my Countrymen, permit me to take notice, that, after ſilencing three of the greateſt adverſaries, * of the eccleſiaſtical eſtabliſhment and ableſt writers againſt the truth of the chriſtian religion, at a time when their ſtrenuous endeavours to introduce their own ways of thinking, became an object of ſerious national concern, both in regard of the Conſtitution itſelf, and the influence their unſound opinions might have in eradicating the ideas of revealed truth out of the minds of men—after giving a final anſwer to a fourth, who, when theſe champions were driven off the field, ſeeking ſhelter in, and ſuccour from external evidence, the writings of the Fathers, by putting the controverſy thus upon a freſh footing, when it would not ſtand upon the fair ground of ſcripture, vainly endeavoured to

* The Author of Remarks, Mr. L—dſ-y, and Mr. T-yl-r, of Norwich, the Author of B——— Mordecai's Letters.

revive

revive and ſupport an expiring cauſe—To what deſperate lengths will not men run? To what little diſingenuous arts do they not fly? To what wretched ſhifts are they not put when they ſet their faces unfortunately againſt the truth? Certainly men muſt have but little reſpect for the underſtanding of their fellow-creatures, or minds infatuated, and underſtandings clouded with ignorance, and under the dominion of error, who could think at this time of day, of perſuading men to forſake the religion of their forefathers, and by profanely, ſhall I ſay? ſetting up eccleſiaſtical writing, againſt ſacred ſcripture, pretend to bring hiſtorical proof, that the blaſphemous and rotten ſyſtem of Socinus, and his followers, artfully dreſſed up in the outward garb of truth indeed but ſtanding not in it, but the finite reaſon of man, full of pride, and long age exploded, that the unitarianiſm, I ſay, of modern days, is like that of the primitive church, which believed faithfully not only in the ſecond perſon, but alſo in the third; and the members of which, great ſinners as they confeſſed themſelves to be, and all men are, preſumed not to approach and pay adoration to the father, without a thorough belief in, and reception of the mediation of the ſon; nay, who went much farther, paying actual worſhip to the latter, by calling upon his name—After ſhewing in the cleareſt light, in oppoſition to theſe errors, the truth of the faith, recommending unanimity, and thoroughly preſſing the neceſſity of obedience, both to God and man; endeavouring thus to preſerve unity in the bond of peace, and inſpire my country-men with the true love of their country, and its moſt excellent conſtitution, both in Church and State: Not a pretended one ſhewn in tumult and diſorder, acts of violence and injury—After all theſe endeavours, I ſay how ungrateful ſoever a return they may have met with, and from what cauſes ſoever this may have come, I think I may with truth, and, I hope, alſo with modeſty ſay, I have done what in me lay, to correct dangerous erroneous opinions and practices, and prevent many of the horrid miſchiefs ariſing from them, that

that have ſince happened in the world. And I hope the eyes of all, are now ſo fully opened, that they can plainly ſee the pernicious nature and dreadful effects of infidelity, corruption of manners, and diſobedience in their true colours.

## *Of the imperfect and fluctuating ſtate of Learning, and the ſtate of ancient and modern Phyſic.*

I COME now at length, according to my promiſe, to treat of the truth in Phyſic. It will, I doubt not, by moſt be thought an impotent attempt to get, ſurely then a vain-glorious boaſt, to pretend to have gotten knowledge, which the learning and induſtry of all ages, have never been able to acquire; and leaſt of all will this be expected to be done by one, who has been ſaid to paſs in an idle manner, the latter part of his days, ſecluded from ſociety, and in a manner, uſeleſs to himſelf and others. As if intenſe application of mind, was not at any time equal to the greateſt exerciſe of body.* But notwithſtanding ſuch unfaithful

* Zimmerman in his Treatiſe on Solitude, among other excellent obſervations, takes notice, that "an habit of diſſipation enfeebles the mind, and that ſolitude and proper retirement from the world, ſtrengthen it" And I can faithfully ſay, that it requires a conſiderable degree of it, to make the obſervation, and uſe the attention and reflection neceſſary, for the completion of ſuch a work as this. But hear him in his own words, according to the tranſlation of them,—"The manners of men are formed by intercourſe with the world, and their characters by retiring into ſolitude. Here they will ſoon diſcover, whether they have only learned complaiſance, or have acquired freedom of thought, firmneſs of expreſſion, dignity of ſentiment, and grandeur of ſtile.

"Solitude raiſes the mind to an high degree of elevation and power. The man who has not courage enough to place himſelf above the prejudices and faſhions of the world; who dreads the reproach of ſingularity; who forms and conducts himſelf upon the example of others; will certainly never acquire a ſufficient ſhare of reſolution, to live a life of voluntary ſolitude. It has been well obſerved, that ſolitude is indiſpenſibly neceſſary

faithful repreſentations, I hope very ſoon to convince ſuch people of their wrong and uncharitable ways of thinking, and to make them fully ſenſible of their miſtake. For though to truly underſtand the cauſes of diſeaſe be undoubtedly one of the moſt difficult parts of knowledge for the human mind to attain, if medical Gentlemen can be perſuaded to lay aſide falſe knowledge, their idle notions and corrupt Theories, partial and viſionary Syſtems—if they can be brought back to ſimplicity of thought and obſervations, have capacity for it and will uſe diligence and attention, I think they will not be, at leaſt it ſhall not be my fault if they are, as heretofore, ſo greatly deficient in it.

Honeſtly to ſpeak the truth however, though I confeſs great induſtry has been uſed in cultivating and promoting the growth of it in its leſſer branches; yet as the great ones, if not untouched, at leaſt are left unimproved, as far as my obſervation reaches; while men are ſo taken up with little things, and ſeem more diſpoſed to contradict and diſcountenance truth than follow it in greater, I cannot ſay that I have any good reaſon to entertain ſanguine hopes, that this or any other part of ſublime ſcience will flouriſh in the preſent Age. Nor from any good reception my former writings on medical ſubjects have met with from the preſent generation, or any gratitude ſhewn for benefits received in greater matters, did not my duty call and promiſe

neceſſary, to give a juſt, ſolid, firm, and forcible turn to our thoughts, as a knowledge of the world is to give them richneſs and brilliancy, and to teach us to make a wiſe and happy application of them.

"The mind of a ſolitary man, attacks prejudice and error, with as much vigour and courage, as an athletic champion meets his adverſary. Repeated examinations bring the object of our attention more near; we behold their properties with greater certainty, and feel more ſtrongly that which we have ſeen. If the ſoul enter entirely into itſelf, it then becomes more eaſy to work with efficacy on external objects. A man of a reflecting and intrepid mind, who retires within his own boſom, ſeizes truth wherever he diſcovers her, and regards with the tranquil ſmile of pity, thoſe who think themſelves authoriſed to ſpeak of her with contempt; he hears without being diſconcerted, the invectives which envy and prejudice throw out againſt him; for he perceives a weak multitude making Hue and Cry, the moment he opens his hand and unlooſes one of the truths which it contains."

bind

bind me, do I think that it could decently lay claim to future favours. As however I well know that this work and what may ſucceed it, may, by divine Providence, lay a foundation of laſting benefit to all generations, ſhould they happily reach future times; whatever may regard the preſent age, I know not that poſterity hath incurred a penalty, and loſt its title by an act of Forfeiture.

It is now between two and three thouſand years, that is ever ſince the time of Hippocrates, that any obſervations on the ſtate of the Air and the diſeaſes ariſing from them, worth notice have been given to the world. An imputation of groſs negligence highly diſhonourable to Phyſic, to ſpeak in the ſofteſt terms! a wide chaſm, I ſay, in knowledge, that ſo eſſentially regards life and health! a dreadful interval, full of horrid miſchiefs, did not the Almighty, at his good pleaſure, in mercy interfere, to correct the errors, and were he not at all times by his Providence all ſufficient, to ſupply the miſerable deficiences of men! For ſtrange to be told, and what makes the matter ſtill worſe, ſo far from imitating it, the beſt writing of the beſt writer in Phyſic, has never been well underſtood, nor conſequently made a proper uſe of all that time.

That many have not ſince riſen having abilities, to anſwer ſuch purpoſes, and promote ſuch great ends, had they retained original ſimplicity of mind, and uſed due induſtry and attention, is what, I hope I ſhall never have pride enough to believe. The great defects then, under which Phyſic hath ſo long laboured, muſt have aroſe from the want of good knowledge, as a ground to proceed upon, ariſing from the too frequent neglect, in young men, of ſtudying the beſt authors, or the want of diligent and perſeverant obſervation. But indeed Phyſic, along with other noble ſciences, is now looked upon too much in the light of an art, or profeſſion to get money, and obtain a fortune; a conſideration too apt to lead men off from nobler views. For though it be both proper and neceſſary, that a man ſhould provide for himſelf and his family, nothing but its true incitement, in generous minds, the ſincere love of

knowledge, will be found ſufficient to raiſe that noble and perſevering temper in the ſoul, neceſſary in enquiries after truth, nor urge men forward in the purſuit of it. Not, but that, as I wiſh not to degrade the profeſſion of an art to be had in honour, I am ready to acknowledge, there are many worthy perſons in it, and ingenuous minds, that take great pains, if they were not unfortunately too often ſpent on little matters. As however I can never be thankful enough for poſſeſſing a ſoul not bent on ſordid views, or that could take up with mean attainments, and ſit down contented with a moderate ſhare of knowledge, as well as one fully ſenſible of the very imperfect ſtate, Phyſic at preſent lies in, I hope there will be no great harm in declaring ſuch bold truths. Eſpecially, if haply it ſhould be a means of perſuading ſome, and ſtirring up others, ſo to improve their natural abilities, increaſe their attainments, and promote knowledge, in this, or any other liberal profeſſion they may take up, as to prove eminently uſeful to one another. Not confining their efforts, to do good, to the ſhort time they are here on earth, and looking at ſuch matters, in a contracted light, but extending their views, and like the true Heroes of old, laying a foundation of beneficial ſervices to mankind, if poſſible to the end of time.

Indolent minds, and ſlaviſh ſouls, whoſe great objects are riches, and the enjoyments of the world, will not think of theſe things. And though every active labourer, the good effects of whoſe honeſt induſtry, reach not beyond the term of his natural life, is entitled to his reward, and this be the common duty of men, it is not fit that all ſhould walk in this common beaten road; confine their ſervices to their fellow-creatures, to a period ſo ſhort, and when they go out of the world leave a blank ſpace behind them; proving no more uſeful to mankind afterwards, than if they had never been. We are not then, to ſet narrow bounds to our deſires of, and endeavours to get wiſdom, nor to be diſcouraged, and ſtop ſhort at the ill ſucceſs of others, but thirſting after knowledge uſe our utmoſt efforts, ſince the giver of it, imparts it with a liberal hand to thoſe who aſk for, and ſeek to find it. It is an Ocean indeed without a bottom, a ſea without a ſhore: but if we proceed cautiouſly, and at the

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ſame time courageouſly, we may, with divine help, at length wade through great depths, though we can never hope to pervade the unfathomable parts of it.

In the cultivation of natural ſcience, it has ever been the fault of Philoſophers to divide the means of obtaining it, and to endeavour to disjoin things inſeparably united; in the preſent times, ſticking cloſe to experiment, almoſt to the utter excluſion of reaſon, and as if it were of no uſe. But, though mens minds are to be under good government, and duly reſtrained, as well as to have ſomething to go upon, and lead them on in their reſearches, without calling in reaſon to the aid of experiment, as well as obſervation, and without its acting alſo with force and efficacy, it is plain to me that ſcience will never be able to make any conſiderable progreſs. Conſidering however the multitude of deceptions there are, and the vaſt number of times mens hopes have been diſappointed, it is not wonderful that, though the many follow the faſhion of the day, men of deep thought and penetration are ſlow in giving credit to new ſyſtems. But objections raiſed on this ground, though plauſible enough, unfortunately lye full in the way of all ſyſtematic knowledge in Phyſic; and are therefore not only fit to overturn falſe ſyſtems, but alſo liable to obſtruct the reception of what is true. But the worſt of the whole matter lyes in this, that with no true ſyſtematic knowledge, to help it forward, good obſervations on the air and diſeaſes, have been alſo at a ſtand in Phyſic, ever ſince the time of Hippocrates*. With nothing then to go upon, and ſet out with, and nothing to lead them on, it is no wonder men, inſtead of preſſing forward in the right path, ſhould ſtrike into wrong roads, become bewildered, incapable of diſtinguiſhing truth from falſehood, loſt in error, and unable to proceed. Under ſuch circumſtances, and when men are ſo widely gone aſtray, it is a matter of no ſmall difficulty merely to bring them back again, and put them into the right road. Thus it hath been with ſyſtems, and as to ancient Phyſic, particularly that excellent piece of writing the Epidemicks of Hippocrates, his Commentator Galen, de-

* Unleſs Doctor Ruſſel's book on the Plague of 1782, be an exception, which I have not ſeen.

clared his inſufficiency, and incapacity of underſtanding them, by only diſputing the authenticity of the title of the third book So far was he from underſtanding the nature, and having any juſt notions of the riſe and progreſs of a peſtilential conſtitution, and the true nature of the diſeaſes under it, or from making good obſervations of his own, in order that he might. And yet, one would have thought, that, when the former had ſet out the road, others might have followed him in the ſame track. Since Galen's time, Hippocrates's method of obſervation, has been deſerted, and Galen's, &c. in general followed, with ſome few exceptions. A deſcription of diſeaſes, with hard names, has been inſiſted on, an uſeleſs parade kept up, and a farrago of groſs medicines uſed, inſtead of exploring cauſes, in order to direct practice aright. And what has been the conſequence? Why, that what with the want of the knowledge of theſe, and of good obſervations on the air and diſeaſes—what with the confuſion introduced into medicine, by the diſputes of the oppoſite ſects of the Rationaliſts and Empyricks, the jargon and pretences of Chymiſts, the formers of Theories, and the framers of Syſtems, Phyſic has remained in a puerile, if not infantine ſtate, even to this day.

Such hath been, and is its ſtate. In the very age we live, it hath undergone a total change, both in regard of principle and practice. Imperfection and inſtability, however, are not peculiar to it, and confined to it alone, but what it hath ſhared in common, with other great branches of knowledge; a matter noticed by the greateſt writers. Cornelius Agrippa, it is well known, wrote a book of the vanity of the ſciences, a complaint as old as the days of Solomon. It is true, he was perſecuted from city to city, and even from country to country, for telling the truth; which the pride, foibles, or greater faults of men, never yet did, nor will bear. Gideon Harvey, a Phyſician of our own country alſo, in the beginning of this century; wrote a book of the vanities of Philoſophy and Phyſic. And men of diſcernment in modern days, have long been diſſatisfied with the inſtability of ſcience and the fluctuating ſtate of learning, and the want of that perfection, many laboured to attain.

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For what one man raiſes, another pulls down and deſtroys. What was Philoſophy, is not ſo now, but has changed its face, as well as Phyſic; and from the inſtability of human notions, even law itſelf has been ſubject to change Religion, indeed, holds its place, * and gains ground of ſuperſtition: it is, however, tainted with corruption of manners, in many of its profeſſors, and a certain degree of lukewarmneſs in matters of faith, over-run with hereſy, and rent with ſchiſm. As to other branches of ſcience, men endued with only a moderate ſhare of penetration, are ſenſible enough, I ſay, that there are great defects in them, which they find themſelves unable to ſupply, and which they have little hopes of ſeeing well ſupplied by others. But, if they are really in earneſt in their wiſhes, to attain that perfection in knowledge, they ſeem ſo ardently to deſire, though they are not to adopt the notions, and implicitly to ſubſcribe to the dictates of others, without examination, and thinking for themſelves, it is yet fit they ſhould learn to be taught. That, influenced by the ſincere love of truth, and not looking with an evil eye, but laying aſide prejudice of every kind, and thinking humbly of themſelves, they may be duly qualified to receive information, and patiently abide inſtruction, from thoſe who are able and willing to teach them.

As to Phyſic, my preſent ſubject, I have already ſhewn the very defective and unſtable ſtate it has lain in, and ſtill lies. The Epidemicks of Hippocrates, the moſt noble work it has to boaſt of, having lain, as I have ſaid, in a kind of dormant ſtate, for ages upon ages; the uſes they might have been put to, having been much neglected, and the benefits naturally to have ariſen from them, having been in a great meaſure loſt. This, it is true, has long been a great misfortune to Phyſic; but the miſchief now, is quite of another kind, not that men cannot, but that they will not be taught. Not but that there are always ſome generous ſpirits, which both think and act, as becomes all noble

* The preſent corrupt ſtate, both of principles and manners, in France, is perhaps an exception.

minds. And if there are any who do otherwiſe, as, however unworthy it may be of rational beings, and diſhonourable to human nature, if we are to take judgment from our knowledge and experience, it muſt with pain be confeſſed, that there are; all that can be ſaid, is, that the health and welfare of mankind, are things too precious, to be left to the will of unreaſonable and intereſted men. Certain it is that, how much ſoever diſpoſed, many phyſical Gentlemen of the preſent age are, to wiſh well to the increaſe of medical knowledge, they too evidently appear unwilling to receive helps, that have a tendency greatly to promote it, from any but their own body. How various, ſubtle, and deſtructive, to the intereſts of truth, are the workings of pride? As if it was a matter of importance how knowledge was gotten, when really acquired. Did not Hypocrates riſe ſuperior to all men in the knowledge of Phyſick, without an academic education? Becauſe no man ſince hath retained ſimplicity of mind enough, been endued with due ability and ſagacity, or rather uſed attention, induſtry, and perſeverance, hitherto, ſufficient to follow him; is that to preclude any one from doing it to the end of the world? Becauſe no man ſince hath been able to obſerve, and deſcribe, a peſtilential conſtitution, and Sydenham, Huxham, and others, at home and abroad, who attempted to tread in his ſteps, made but faint efforts, in deſcribing ſtates of the air, and the diſeaſes produced by them; is it therefore unlawful for any other perſon to make better, and give to Phyſic another deſcription, of a peſtilential conſtitution itſelf? Becauſe his commentator Galen, and our own countryman Friend, did not underſtand his works, is no man after them to do it?

The elapſing of ſuch an enormous interval of time, as between two and three thouſand years, without any good obſervations being made on the air, and the diſeaſes ariſing from its ſtate and temperature, or duly explaining, and bringing into good uſe, the excellent ones of Hippocrates, is undoubtedly a conſideration fully ſufficient, greatly to leſſen, if not entirely take away, future expectation on the one hand, as well as mightily to abate any common degree of

of reſolution, and damp the ardor, and leſſen the force and perſeverance of moſt minds, on the other. And after all this, perhaps, an attempt to do it, may by many be thought, to be the effect of an infatuated underſtanding, rather than the rational effort of a well directed mind, But what is to be done? Nothing leſs than this, and a great deal more will do. For the continual coining of new hypothetical ſyſtems, inconſiſtent with obſervation, and diſcarding this, and taking up notions of diſorders, founded on whim and caprice, will ever confound the principles of this noble art, and turn it in its courſe retrograde. Nor if we go with the ſect of the Empyricks, adopt their notions, and pretend to cure diſeaſes, without knowing any thing of their cauſes, ſhall we get one ſtep forwarder? For knowledge in Chemiſtry or Botany, will make ſmall amends in practice, for the want of that true phyſical ſcience ſubſtantially founded, both on reaſon and obſervation, which is alone capable of reducing Phyſic to any tolerable ſtate.

It is doubtleſs, not fit that any one ſhould diſpute the palm of obſervation with Hippocrates, the great father of Phyſic, worthy of all due honour, becauſe he it was who firſt laid out the road, wherein others were to walk, and made the firſt great advances in it. Otherwiſe, I could, and in the following pages, even ſhall ſhew, that it required more ſagacity, induſtry, and attention, to obſerve, and mark out, the multifarious, and diffuſive peſtilential conſtitution, ſpreading out itſelf, as it were, and bringing in the diſeaſes, as well as their more violent ſymptoms, attendant on its continuance and increaſe, by degrees, hereafter to be diſcribed, than that which came on more ſuddenly, in his time, under the meridian of Greece.

Nor, though my medical writings and rational and honeſt endeavours to teach others, ſo far from being duly attended to, have not even been treated with decency, to ſpeak fooliſhly, if it be proper to declare the truth, can I ſtop even here; ſince I can without preſumption take upon me, under Providence, to claim more. Namely, the diſco-

very of the hidden ſources, and real cauſes of diſeaſe, as ſeated in the blood and juices, their general and local effects; and as dependant alſo on relaxation, debility, and defect of the moving powers, general or particular, hereditary or acquired. Not a defective ſyſtem like that of Hoffman, Boerhaave and others; but one, that by means of ſtrict obſervation, and through rational and true deduction, is at unity with every principle, and accords with every phœnomenon in Phyſic.

The conjunction of theſe cauſes, tends to ſtagnation ſuddenly deſtructive, or ſucceeded by violent, quick, irregular circulation, or more feeble and intermitted efforts; ending, where the natural powers, can attenuate the morbid tenacious juices, and by degrees throw off, by the diſcharges from the body, the greateſt part of the oppreſſive load, in the gradual return of health; or, when by reaſon of the intractable and inſeparable nature of them, and her own inability, ſhe cannot, in the obſtruction, and at length the ſtoppage of all motion, corruption and death; or elſe in chronical diſorders; often, ſooner or later, coming to the ſame fatal iſſue. And where no ſuch febrile efforts ariſe, the whole tribe of the former, that is chronical complaints, inſtead thereof, under various circumſtances, are brought on, for want of ſuch ſalutary efforts. And their cauſes in the blood, are the want of ſanguification, and the abounding of an invincible tenacity, joined with acrimony, hereditary at firſt, and gradually increaſing, in the malign quality of its virulent parts, and alſo in quantity, by reaſon of thoſe glutinous, compacted, oppreſſive, foul and acrid juices, that by intemperance, are taken in, by retention accumulated, and by frequent circulation, without ſanguification and aſſimulation, heat, and the long action of the veſſels upon them, without the proper reduction of their parts, and their diſcharge from the body, are by degrees rendered like thoſe imperfect and depraved parts of the blood, which are hereditary, and added to them.

But with theſe things, Hippocrates was not well acquainted; nor can I give them ſyſtematically, within the com-

compaſs of this work. * It is true, he had ſome juſt notions of the cauſes of hereditary diſeaſes, which he has given us, when treating *de Morbo ſacro*, in general terms, and according to the tranſlation, in the Geneva edition of Fœſius, in the following words, which I have elſewhere quoted. "*Initium verò ducit veluti alii morbi ſecundum cognationem. Si enim ex pituitoſo pituitoſus, &c. quid vetat ut cujus parentes hoc morbo detineantur, eo quoque et poſterorum aliquis corripeatur. Cum nempe genitura ex omnibus partibus corporis procedat, a ſanis ſana et a morboſis morboſa.*" Theſe ideas, however, though excellent as far as they will go, are not ſufficient to carry us to the extent of that great ſubject, the cauſe of diſeaſes: which muſt therefore be left to a regular inveſtigation, and accurate deſcription, and future time and leiſure.

As to the Epidemicks of this great author, they are, as I have already ſaid, undoubtedly the moſt valuable part of his works. The propriety therefore, of the freedom wherewith they ſeem to have been treated, in the preſent times, I muſt confeſs, I cannot well underſtand. Since, if I am not miſtaken, it appears to me, if we are to think with certain medical Gentlemen, we are not to believe there is any thing extraordinary in them. However, if ſuch are really their ſentiments, I can truly ſay, they are very extraordinary; and that it is by no means proper, we ſhould take their word for it. Certain it is the tranſlation of that part of them, the public has been favoured with, ſeems more to diſcredit, than recommend the ſtudy of them. Having, according to my opinion, without entering at all into their ſpirit, explaining well their nature and deſign, informing us of their true ſubject, or conſidering the cloſe connection their ſeveral parts have with each other, as ill an effect upon theſe moſt excellent writings, as any tranſlation at leaſt, if not parody in our language, ever had upon thoſe of Virgil.

* The great defect of modern Phyſic, appears to me to lye in the want of ſtrict attention to the animal œconomy, and the knowledge of the nature of health, without which, it is impoſſible to underſtand diſeaſe.

But

But let us not deceive ourſelves, it is not the proper buſineſs of the preſent age to miſrepreſent, depreciate, and try to demoliſh, the works of ancient authors, and raiſe a temporary reputation on their ruins; nor to endeavour thus to undermine and deſtroy, the ſubſtantial foundations of ſolid learning, that were laid by them in former times: but, to build upon them, that the edifice in time may be made perfect. The ſtudy however, of this great work of Hippocrates, as well as of ſome other excellent parts of his writings has been laid aſide too much, I am fearful, and not enough inſiſted on, in the preſent age. But however, thus neglected, and viewed in no favourable light by ſome, at leaſt not had in ſuch great eſteem as formerly, his Epidemicks, as well as his Aphoriſms and Prognoſticks, certainly contain an accuracy of obſervation, truth, and ſtrength of deſcription, and profound ſagacity, that has baffled the attempts of all ſucceeding writers, to give good comments on; ſuch depth of knowledge, and truth of ſimple practice, grounded on obſervation, and the knowledge of natural efforts, and their effects, and ſuch preciſion, and force, in a nervous and often even ſublime ſtrain of writing, as no medical author has come up to, nor like him been maſter of, ſince his time.

Could I ſee a good Comment on them, I ſhould with pleaſure ſubſcribe to the terms *learned* and *ingenious*, as they relate to a reſpectable body of men, or to particular perſons. But as the preſent work was written, and its ultimate intention is, an endeavour to preſerve the health, and even ſave the lives of numbers, that fall a ſacrifice daily to the want of true knowledge, I cannot deal in compliments, when reprehenſion is called for ſo loudly. For the mere application of the term *putrid*, to the burning fevers attending the preſent peſtilential ſtate, that aroſe with it in the year 1778, and have continued ever ſince, and by which thoſe of a long continued ſtate of the air were properly enough diſtinguiſhed, by confounding things different in nature, and that have eſſential diſtinctions, and ſometimes even carrying on unfortunately the practice, made uſe of in the latter, into the former, has been productive,

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at times of the worſt conſequences. This I muſt take the liberty to mention; for to be made ſenſible of error, is the firſt ſtep to the reception of truth.

In the time of the great plague in London, its true cauſes were ſo little attended to, and medical Gentlemen were ſo little acquainted with the nature of a peſtilential ſtate of the air, its cauſes and effects, that even Doctor Skinner imagined the infection was brought into the Kingdom, in hides imported from Holland. And indeed it has been the common vulgar notion in later times, that communication by infection carried from other places, ſituated in very hot and intemperate climates, is the ſole cauſe of the riſe and progreſs of this dreadful diſorder, at leaſt in northern ones.* Though I will do Baynard the juſtice to mention, that, according to Echard's account, in an hot intemperature, clear ſky, and apparent fine weather, he obſerved, at the ſame time, ſo great a ſtagnation in the air, that for ſeveral weeks, if not ſome months, there was not ſo much wind as would turn a Vane. However, through the general prevalent ignorance of the cauſes of this raging Peſtilence in the atmoſphere, under this hot and unventilated ſtate of it, fires by the advice of ſome medical Gentlemen, were lighted in an evening in the city; which raiſed the intemperature on a ſudden, to ſuch an height, that 4000 are ſaid to have died in one ſingle night. There are great defects and errors, I think, in the writings of the late celebrated, and otherwiſe learned, Doctor Mead, upon theſe ſubjects. Whoſe opinion was, that the plague could not riſe in any climate, but that of Ethiopia, or, at leaſt, that it did in general ariſe in it. May it not take its riſe, I aſk among chriſtians, by Almighty power, in any climate upon earth? Thus we ſee that the want of a due degree of faith infallibly includes a want of knowledge. And mi-

* The Plague certainly may be brought into a kingdom, and ſpread in large cities and towns, in confined ſituations, and an impure air. And therefore great vigilance is neceſſary, and all prudent methods undoubtedly ought to be uſed to prevent it. But it will not rage without the heat of a peſtilential atmoſphere.

ſerable

ſerable indeed muſt that ignorance be, that ſprings from the want of proper belief in the Providence of our maker.

The wiſe ſon of Sirach, juſtly obſerves, that the Phyſician is worthy of all due honour, that is the good one. For the credit then, of ſo noble an art, let us all with the greateſt induſtry, by unwearied application, endeavour to obtain true knowledge of it. Not ſuffering reputation for ſkill in the practice of it to reſt, more than is expedient, on academical titles, which, in many Univerſities, are perhaps too incautiouſly beſtowed, and in ſome, irregularly, or ſoon obtained.* For that Phyſic is a very abſtruſe ſcience, naturally tending very ſlowly towards perfection, and that requires peculiar ability, and great attention, to acquire even only a tolerable ſhare of knowledge in, the very imperfect and fluctuating ſtate it has lain in, for ſo many ages, affords convincing teſtimony. There is indeed, one, nay there are two moſt honourable ſeminaries of learning, that do not degrade themſelves, nor confer their principal degrees in Phyſic, till after length of time, and a ſevere ſtudy. And yet, not withſtanding the many eminent men they have educated, aud nouriſhed in their boſoms, they never turned out a Phyſician, that did not labour under great defects. For my own part, I hold academical honours in ſo low eſteem, that I would not now accept a degree in Phyſic, from any Univerſity in Europe. For, thanks be to the Almighty Donor, for his ineſtimable gifts, I ſhall ever conſider it as more honourable, to be able to think and write well upon ſublime ſubjects, without an academical education, than with one; which muſt be the ſentiment alſo of every ingenuous mind, and a juſt tribute which every generous one will pay. And as to external things, as I never expected an increaſe of fortune, or promotion in rank of life, from my labours in writing, ſo do I not now even deſire them, but chiefly to approve myſelf to that great maſter, whoſe I am, and under whom I act, and to give a tolerably good account at laſt, of the uſe of thoſe talents he has beſtowed on me.

* The Univerſities in England, in particular, and perhaps ſome others are to be excepted.

It

It unfortunately happens, frail as we are, and inconſiſtent in our conduct, as hiſtory and experience give too convincing teſtimony, that we are either apt to admire men more, rate their abilities higher, and think their works and actions greater, than reaſon and ſound ſenſe will warrant, or to run headlong, and fall into the contrary extreme, and indulge another propenſity, full as erroneous, but not quite ſo laudable, that of depreciating theſe things in others, ſometimes, perhaps, more than ordinarily capable of inſtructing, and doing great ſervice to mankind: eſpecially if they happen to be placed in an inferior ſtation, attempt to controvert eſtabliſhed notions, and introduce new ways of thinking, and have gained knowledge in a way unuſual, and not by following the rules which cuſtom has preſcribed, and adhering to the forms laid down. Nor let any one think, that by ſaying this, or any thing in this work, I am profeſſedly magnifying my own powers, recording my own merits, or trumpeting my own praiſe. There is a time, and there are alſo circumſtances nearly related to, nay often cloſely connected with general good, under which, a due defence of one-ſelf, is by no means improper and unwarrantable. The greateſt, moſt patient, and even the beſt of men, have been forced, by a kind of neceſſity, to remind their fellow-creatures of their endeavours, and even actions done for their good, and obliged ſometimes to come forward, though unwillingly, and ſpeak a little of themſelves. And it is worth conſideration, that what is now offered to the world, the image and repreſentative of a great work, never yet well underſtood, but therein explained, and a glance of the principles of true Phyſic, to be the ſubject of another work yet to be undertaken, knowledge long deſired, and which men have been long in vain aiming at, has not been ſuffered to proceed at laſt, from the body of the learned; and that, to let down human pride a little, as it ſhould ſeem, and ſhew men what ſimplicity of mind, attention and perſeverance, and the love of truth will do, it appears in ſome meaſure to have been the will of Providence, that it ſhould not. If then, men will receive it, let them receive it. But if, though I hope there are ſome who will act more nobly—but if, on the contrary, I ſay, they are determined

termined not to accept of any knowledge, nor receive any help from inferior hands, the matter for the preſent is then over, and poſterity muſt look to it, when it hath opportunity.

But till ſomewhat of this ſort happens, and the light of truth, by divine power, riſes upon Phyſic, from this or ſome other quarter, miſerable, without preternatural help, will be its ſtate, and that of thoſe who practice it. For it may be juſtly ſaid, that all which was written ſyſtematically before the time of Boerhaave, or hath been ſince, had better have been buried in oblivion, or committed to the flames: and of practical writings in it, that all of them, except thoſe of Hippocrates, are miſerably deficient, becauſe they neither have good obſervation for their baſis, as his have, nor true ſyſtematic knowledge for their rational ground to reſt on.

Having thus prepared the way for my future uſeful, and inſtructive, progreſs, in treating of the ſcience of Phyſic, and, laying aſide other matters for the preſent, entered upon this great ſubject, the deſcription of Diſeaſes according to the truth, or as accordant with the Phœnomena, and therefore confirmed by obſervation, the handmaid of the ſciences, I ſhall now proceed firſt to take notice of ſome precedent ſtates of the air, and afterwards deſcribe a ſubſequent peſtilential conſtitution, a matter ſo much in diſpute among the learned of all ages, ſince the time of Hippocrates, its continuance and increaſe, the diſeaſes under it, and the effects and proper uſe of medicine in them. And having thus laid open the road, I ſhall not deſert the weary traveller, on this rugged, unbeaten, unfrequented, and even deſerted path; but by expoſing, the great objects to be obſerved in it, to his view, endeavour to engage his attention, and quicken his progreſs in it: in proſecuting theſe enquiries, giving ſuch deſcriptions, making thoſe deep reſearches, and elucidating ſuch great matters, illuſtrating natural things, even by things divine.

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# SECTION I.

*Containing ſome general Obſervations on the Air and Diſeaſes, from the Year 1740, to 1750; being the declenſion of a State productive of Continual Fevers, often attended with violent inflammatory Diſorders.*

IN the beginning of the Year 1740, there was an exceeding cold Winter, with a clear ſky, and a continuance of froſty weather, without remiſſion, for nine weeks, which was ſucceeded by a very hot and dry Summer. Theſe were indeed, very extraordinary ſeaſons, but will give us ſome notions of the general temperature of the Atmoſphere, both before and afterwards. For though no Summer long before nor after this, was ſo hot and dry, nor Winter ſo ſevere, yet the former was uſually diſpoſed to be of an hot, and frequently alſo dry temperature, and the latter of a very cold one, both in the Years long precedent to this period, and alſo thoſe ſubſequent to it, even to the Year 1750. The annual winds in March, were alſo very ſharp and piercing; a conſiderable degree of purity in the Air prevailing, and a fine genial ſtate, and wholeſome mildneſs of it, coming on, when theſe ceaſed.

The Diſeaſes ariſing in, and attendant on this ſtate of the Atmoſphere, were perfectly conformable to it. For when in bodies unhealthful, through hereditary and acquired tenacious, impure matter in the blood, with the addition frequently of a groſs load, lately taken in, and a quantity of vicid lentor, thus formed by intemperance,

want of exerciſe, regular ſanguification and due diſcharge, the habit became oppreſſed, the effort that came on, through change of ſeaſon, or by taking cold, was well ſupported, and with a conſiderable degree of firmneſs, both of ſtrength and ſpirits. The pulſe being in general ſo ſtrong and hard, as not only to require, but alſo well bear repeated bleeding, in the acute Rheumatiſms, inflammations of the Pleura, Lungs,* and Bowels, Eriſipelas's, and other local diſorders, attending the continual Fevers of this ſtate. Beſides, upon the riſe of theſe Diſorders the heat was generally ſo great, as to ſoon change the viſcid unformed humours in the blood, into a tough ſize, called then inflammatory, as well as the Diſorders that occaſioned this ſudden extraordinary alteration in them. For which reaſon, and to diſtinguiſh it from others, I have called the ſtate of the Air, producing Diſeaſes ſo circumſtanced, or conditioned, an inflammatory Conſtitution.

The Fevers, attended thus with violent inflammatory Diſorders, under this ſtate of the Air, were not unkind in their nature, nor when proper evacuations were ſeaſonably uſed, often diſpoſed to prove mortal; or by wanting due critical diſcharges, apt to degenerate, and turn into lingering Diſorders. In pulmonary caſes however, when theſe were neglected, or not duly uſed, if a mortification did not come on, the conſequence ſometimes was an impoſtume in the Lungs. And where criſes were deficient, the ſizy matter retained within, and what was impacted in the obſtructed veſſels of the Lungs, not duly concocted and diſcharged by expectoration, perſons thus circumſtanced and affected became ſubject to a ſlow Fever, with ineffectual efforts, afterwards, which gradually conſuming the body and waſting the ſtrength, generally at length ended in ul-

* A ſtrong young Man, in a violent caſe of this kind, after loſing as much blood as one Practitioner durſt take away, had 100 ounces more drawn away by another in eight hours, under the very preſſing circumſtances of his caſe; 18 ounces more, at once, the next day, and the ſame quantity the day following, being ſeized with an hæmorrhage at the noſe on that ſucceeding; after which perfect relief of the oppreſſed ſtate of his conſtitution, he recovered with eaſe, and without any ill conſequences from ſuch large evacuations.

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cerations of the Lungs, and the diſſolution, and the profuſe diſcharge of the tenacious and corrupt humours, by the bowels, and the Patient thus ſunk under the Diſorder. Conſumptions alſo often came on from colds, in impure and weak habits, eſpecially in ſuch as were hereditarily ſubject to them. Going on according to their nature in a chronic manner, till gaining ground, and growing worſe by degrees, they at length ended like others, in hectic Fevers, and conſumptions of the Lungs, and the fatal train of conſequences attendant on them.

From the above deſcription, it is evident that conſumptions of the Lungs, were common diſorders under this Conſtitution. And, indeed, theſe with chronic Rheumatiſms, Dropſies, Aſthmas, Cancers, and ſome Palſies, for theſe were not yet become common Diſorders, but generally affected only aged perſons, with ſome other local and general ones of the chronic kind, made up the chief part of thoſe Diſeaſes incident to this temperature.

As to Agues and intermittent Fevers, during this more pure ſtate of the Atmoſphere, they were indeed violent in their paroxyſms, and often in their beginning, had no intermiſſion: they were, however, friendly in their nature, active indeed, but ſalutary in their efforts, and perfect in their criſes, and eaſy of cure, when theſe were properly waited for, and not protracted, nor the diſorder confirmed, and made ſubject to return, by the premature uſe of aſtringents. Quartans indeed, which uſually happened in Autumn, required a different, and even very nice mode of treatment: it being ſometimes neceſſary, when they hung on long, and had a chronical tendency, to join corroborants with ſteel, in ſmaller doſes, daily, with the attenuant and gently evacuating method.

During this more healthful ſtate of the Air, however, after the intermittents of the Spring went off, and the heat of Summer came on, continual Fevers, by reaſon of the ſudden rarefaction of a large quantity of impure humours on their attack, incapable of being ſoon diſcharged by perſpira-

tion, during this ſeaſon in particular, took a different turn. The febrile matter being apt to riſe very ſoon, with great force into the head, and in bad caſes, bring on violent delirium, and great affection of the nervous ſyſtem; and at length, in fatal ones, when patients began to ſink under the diſorder, often ſubſultus tendinum. At other times and in more lingering caſes, a coma ſupervened. But notwithſtanding the violence of the Fever, in its increaſe, and at its height, though the pulſe was ſtrong, there never was that peculiar tenſion on the arteries, and hardneſs of it, nor were the viſcid humours, wherewith the body was loaded, on a ſudden, through exceſs of heat and action, turned into a tough ſize, as was the caſe in thoſe attended with local inflammation, eſpecially of the Lungs and Pleura; which called for repeated diſcharges by bleeding, which by reaſon of the greater attenuation and diffuſion of the morbid matter, the Fever thus circumſtanced, did not well bear. And the cauſe of this difference appears to have riſen, as I have ſaid, from the contrary effects of different ſeaſons upon loaded habits; namely, from the ſudden rarefaction of a quantity of impure humours, chiefly affecting the head in febrile diſorders of the Summer, and a ſudden determination of them, in a groſſer ſtate, on the cheſt, bowels, and muſcles, through the ſuppreſſion of perſpirarion, and other diſcharges, and contraction of the veſſels by cold, on the attacks of Fevers in the Winter. Producing violent inflammations, ſometimes in one cavity of body, and ſometimes in another, and at others acute Rheumatiſms, and making them attendant on continual Fevers, as the various conſtitutions of different perſons were diſpoſed ſo to bring them on. Not but Phrenitis itſelf has been the effect of, and attendant upon Fevers that have aroſe in the Winter*, and that for a great length of time too, as I ſhall have occaſion to ſhew, in the following pages.

Notwithſtanding any ſpecific difference there might be in the nature of theſe Fevers, or in ſome of the cauſes that

* Vide Hippocr. Sect. v. libr. de Affect.

brought

brought them on, or the circumſtances that attended them, the efforts in both were ſtrong, vigorous, and effectual, and frequently ſalutary. They being of the kind, that in natural, regular ſeaſons, as Hippocrates hath obſerved, conſiſt well and have free diſcharges, good and perfect criſes.

In the Summer alſo the ſmall Pox and Meaſles generally broke out and ſpread, in large towns; being in ſuch cloſe ſituations, in very hot ſeaſons, often of a bad kind, and attended with a conſiderable degree of mortality. And this is a ſhort, general deſcription, of the inflammatory ſtate.

Notwithſtanding however the more pure and healthful ſtate of the Air, above deſcribed, and its ſalutary effects, there were from ſome peculiar changes in it that were unobſerved, and the gradual declenſion of this inflammatory State, even as early as the Year 1740, Fevers that were diſpoſed to run through whole families, and alſo again in 1745: preludes to the great change that came on in the temperature of the Atmoſphere, after the Year 1750.

# SECTION II.

## *Of the Putrid State and the Diſeaſes under it, from the Year 1750, to 1778.*

SOON after the Earthquakes in London in the Year 1750, and the very hot weather about that time, the temperature of the Atmoſphere began to change conſiderably, and things took a turn much for the worſe. And not many Years afterwards, through ſome wet ſummers, and a great quantity of rain that fell in this ſeaſon, for ſeveral Years together, * as well as at other times of the Year, the air was ſo cooled, and the power of rarefaction ſo much leſſened, that it began to be loaded with groſs unattenuated, and impure vapours, eſpecially in low and damp ſituations, and on the decline of the Year. And though the Air retained a conſiderable degree of mildneſs, and had ſtill much of a benign nature and influence: yet wanting its more active power, and ſalutary effects, with the loſs of its wonted purity, which had for ſo many Years prevailed, the ſtate productive of the continual Fevers, and violent inflammatory Diſorders, deſcribed in the preceding Section, ceaſed.

It was not long before the ill effects, attendant on this unfavourable change in the Atmoſphere, were felt. For through a predominant groſs moiſture in it, the ſolids grew

* From 1754, to 1764 inclusive, there were continual wet Summers according to the Obſervations of *Mr.* White of Selbourne.

relaxed

relaxed, and the nerves were unſtrung. And bodies, eſpecially weak ones, began to accumulate a large quantity of viſcid, unattenuated, unſanguified, and impure humours; the blood for want of due preſſure, and the proper action of the veſſels upon it, became of a looſe texture, and a kind of Diſcraſy prevailed; and abounding with heterogeneous parts, through the bad influence of foul Air, was diſpoſed to corruption.

The conſequence of this impure condition of the blood and humours, and oppreſſed and unhealthful ſtate of bodies naturally weak, or rendered ſo by indulgence, indolence, and want of exerciſe, eſpecially ſuch as were ſubject to a conſiderable degree of hereditary impurity, was, that perſpiration growing defective, in a cold, and damp Atmoſphere, moiſt, and ſtagnant Air, the palate, mucous glands, and membranes of the throat, became oppreſſed with viſcid humours, diſpoſed to ſtagnate and corrupt, for want of due excretion, and through a too languid circulation in the veſſels. Hence in low ſituations, full of foul vapours, and in places not well ventilated, a new diſorder began to make its appearance called the ulcerated ſore throat; white bliſters ariſing upon it tending to ulceration.

If on the riſe of the Diſorder, a vomit was judiciouſly adminiſtered, by diſcharging a load of foul humours from the habit, it ſometimes put a ſtop to it. Otherwiſe often a gangrene came on, foul pallid ſloughs were formed, and a noiſome ſmell iſſued with the breath, that communicated the Diſorder to others. In which caſe, it was neceſſary to have recourſe to the Bark and Port wine, to ſtop the progreſs of it, ſupport the conſtitution and ſeparate the ſloughs.

But how neceſſary ſoever, on this account, this method, though it took away the effect, did not diſcharge the cauſe from the body, many perſons not recovering good health, as is generally the caſe after Diſeaſes, when they are properly carried off. Nor did the former always happen, for many, under this treatment, died of the Diſorder; which

was of the putrid kind, attended with no inflammatory diſcoloration.

About the time, when this complaint firſt began to appear, a continual remittent Fever alſo aroſe of the putrid kind, that was generally attendant on it This however was not always the caſe; for in ſome perſons, a mortification crept on by degrees unperceived, without a febrile effort, and black ſpots appeared on the palate and throat, while perſons ſo affected walked about, and in all other reſpects, ſeemed to be in perfect health; and they died ſuddenly, the whole maſs of blood being in a ſtate of putrefaction.

In this Fever, among the ſymptoms common to the riſe of Fevers in general, the ſickneſs of the ſtomach was remarkable, and uſually diſcharged by vomiting, a large quantity of phlegm, and other foul humours. But beſides this, there often was a ſudden diſſolution of the juices, which ran off in large quantities by the bowels, early in the Diſeaſe. Nor were debility and lowneſs of ſpirits attendant on theſe caſes alone, but in more or leſs degree common to all. For this Fever, as I have obſerved, did not go on with one conſtant tenor, or near it, but had evident remiſſions, uſually in the day time, and febrile returns, or paroxyſms in the night; owing to the relaxing warmth of the former, and cold bracing power in the latter. The pulſe alſo, though it felt oppreſſed, was ſoft and not hard, even when local inflammation attended; the ſkin alſo was not ſo hot and dry, as in the continual Fevers of the inflammatory conſtitution. And theſe things, with a peculiar white tongue, which hardly ever acquired a ſtate of brownneſs, and the general want of thirſt, were the characteriſticks of this Diſorder, and diſtinguiſhed it from the Fevers of the preceding ſtate.

This putrid Fever was of an unkind nature, and diſpoſed to have a difficult and imperfect criſis; and therefore apt to hang on long, and ſometimes wear out the Patient. And if ſuch obſtinate caſes happened in the Summer ſeaſon,

ſon, when during the heat of weather, the returns varied, and the acceſſions of increaſed Fever, or febrile paroxyſms, ſometimes came on in the day, and the remiſſions in the night, the affected perſon during the former, was often vexed with delirium, for ſome length of time, and reduced by degrees, to the laſt extremity. And if the patient weathered this difficult and tedious ſtate, and got through the diſorder, health ſometimes was not reſtored, till after regaining ſome fleſh and ſtrength, an impoſtumation or two were formed behind the ears, or in ſome other part of the body. Before matters came to this extremity indeed, a ptyaliſm coming on, after other ineffectual efforts had been made, often ſolved the Diſorder.

This Fever, which ſometimes, and in its worſt ſtate, ſpared none, but ran through whole families, without diſtinction of age or ſex, though it was moſt apt to attack thoſe of oppreſſed and lax habits, as Women and Children, was alſo common to all ſeaſons of the year, though the Spring was moſt free from it. Many died of it in low ſituations, cloſe towns, and places where there was not a proper current of air; while more lofty ſituations were free from it, for ſeveral years. And even when it began to appear in theſe, moſt perſons affected with it, under good management, recovered. A proper degree of rarefaction of the air appeared to be uſeful, during the cold ſeaſon of the year, for in one Winter, particularly remarkable for calm weather, a ſtill Air, and Atmoſphere loaded with hanging vapours, many who lived in ſolitary places, and houſes in the country, at a diſtance from each other, were carried off by it; while at the ſame time, the town of Birmingham, where the Air was more rarefied, and the impure vapours thereby, in a great meaſure carried off, felt none of theſe ill effects.

As to medical treatment—bleeding, by reaſon of the relaxed ſtate of the fibres, and tendency of the humours to putrefaction, was in general bad, both in this Fever, and the ulcerated ſore throat, many loſing their lives by a ſingle

gle imprudent uſe of it. And even in local inflammations, attendant on this Fever, the pulſe fell conſiderably upon a ſecond bleeding, and few had ſtrength firm enough to bear well a third. But giving a vomit on the attack of the Fever, as in the beginning of the putrid ſore throat, was of great uſe and conſequence.* And after this the uſe of antimonial attenuants with camphire, and the giving of gentle ſaline aperients with rhubarb, every other day, were proper remedies, when no flux by the bowels came on. And when, during the courſe of the Diſorder, and increaſe of the Fever, the head grew affected, a bliſter on the back was a kind of ſpecific. The cure being generally at length perfected, by a gentle doſe or two of Calomel, and the uſe of a light decoction of the Bark, given two or three times a day as a ſtrengthener, in the decline of the diſorder, when the criſis was over, and the Patient on the recovery.

There were caſes, however, that called for the uſe of James's Powder, and ſometimes in pretty large doſes too, where there was a conſiderable accumulation of foul humours in the habit, and great oppreſſion of the veſſels; which, though they operated powerful by vomiting and purging, and alſo by perſpiration, were ſometimes tolerably well borne, even when the Diſorder had hung on ſome time, and perſons appeared weak. This medicine alſo relieved many, to whom the Bark had, without judgment, been prematurely given. For there was no proper place in general for the uſe of this medicine, early in this Fever, notwithſtanding any notions ſome had conceived, that it might be uſeful in a putrid one, of which kind this was, by its antiſeptic quality. For, by bringing on a conſtriction of the veſſels, in an improper ſtage of the Diſorder, and alſo compacting together the foul humours, and by both,

* By directing, by the uſe of a Vomit, the abounding groſs matter oppreſſing the body, and not capable of being attenuated during the courſe of the Diſorder, to the ſtomach for diſcharge; a Woman in the decline of life in a very bad caſe, was ſaved. Who, after the uſe of this remedy, vomited up large quantities of viſcid, putrid phlegm, in, and on the decline of the paroxyſms, daily, during a long courſe of returns of delirium, and other bad ſymptoms, in them.

re-

preventing the free diſcharge of the offending matter, and thereby protracting the criſis, Patients became more oppreſſed and low, after taking this otherwiſe powerfully invigorating medicine, when properly given, than they were before the uſe of it.

Beſide the due adminiſtration of medicine, a proper regimen was alſo neceſſary, and that was agreeable to the nature of the Diſorder. This conſiſted in a diluting, antiſeptic, and ſupporting mode of diet, and the uſe of ſubacid liquids, light mutton broth, and ſmall wine and water, when great weakneſs and lowneſs came on; and when a flux by the bowels attended, in ſupporting the Patient with thin rice-gruel, with or without a little wine, as the circumſtance of the caſe required. For as to bread, the quantity of ingeſted viſcid matter was ſo great, and for want of due attenuation and aſſimilation, the body ſo oppreſſed therewith, that it was in general loathed, during the whole courſe of the Diſeaſe, though continuing often for many weeks. Lying in large rooms, and having a free circulation of Air in them, was alſo of great uſe. And that the Patient ſhould be got out of bed every day, and ſit up for ſome hours in the remiſſion of the Fever, if able to do it, was abſolutely neceſſary. For this, by contributing greatly to ſupport ſtrength, and prevent a ſudden increaſe of weakneſs, enabled perſons to weather the Diſorder, which was often long and tedious, and thereby did much towards ſaving many.

The intermittents of this conſtitution evidently partook of a debility of action, ariſing from the relaxed ſtate of the ſolids, like that attendant on the efforts of the continual remittent Fever; not however in ſuch a degree as might have been expected, nor were they in general of a very unfavourable kind. For the Air in the Spring ſtill retained a great degree of purity, and the ſalubrious March winds returned annually, with their uſual power. About the Year 1758, however, after an open fine Winter, there were ſome violent caſes, in which the oppreſſion in the habit was ſo great, having been accumulating during all the unnatu-

unnaturally mild preceding ſeaſon, that upon a premature and injudicious uſe of the Bark, the veſſels of the brain, from the conſtriction brought on by its uſe, on the other parts of the body, became ſuddenly oppreſſed, and ſome perſons dropped off unexpectedly, to the great ſurpriſe of the unwary Practitioner.

As to the chronical Diſorders of this period, it was very obſervable, that palſies were become much more common, but that there were fewer conſumptions And this intemperature of the Atmoſphere, and the Diſeaſes attendant on it, continued from the Year 1750, to 1778. Continual Fevers after 1760, appearing to increaſe in violence, and after 1770, and particularly in 1772, growing ſo bad, and attended with ſuch great pains and ſoreneſs over all the body, ſuch an increaſe of ſymptoms and malignity, as to ſhew a ſtill ſtronger tendency to the nature of the peſtilential Fever, that followed them in 1778.

SECTION

# SECTION III.

## *Of Peſtilential Conſtitutions.*

PESTILENTIAL Conſtitutions are of various kinds and degrees, from thoſe high ſtates productive of the Plague itſelf, down to thoſe producing diverſe other peſtilential Fevers, of a milder kind, the riſe of one of which I am about to deſcribe; each of them as brought on by intemperature of the Air, as common to all, and communicable by infection, being a kind of Plague.

## CHAPTER I.

### *Of the Local Peſtilential State of 1778.*

THE excellent Hippocrates, after deſcribing in the firſt book of his Epidemicks, three antecedent, ſucceſſive annual ſtates of the Air, gradually productive of a multitude of Deſeaſes, of violent, obſtinate, and uncritical Fevers, the burning ones that aroſe

aroſe in the laſt ſtate, being ſo highly malignant, and attended with ſo great dejection of ſpirits, as to have a ſtrong tendency to a peſtilential nature, opens his ſecond book with a deſcription of a ſubſequent, local, and alſo temporary peſtilential ſtate, that came on in Cranon, an hot town in Theſſaly, where there were warm Baths, and lying in a low ſituation, with a Southern aſpect.

After deſcribing the highly inflammatory ſtate of, and great heat in the Carbuncles, and the ill-conditioned ſtate of the humours, and the violent and obſtinate nature of the burning Fevers, which roſe under this peſtilential intemperature, and obſerving that though burning Fevers ariſe at other times of the year, the Summer is moſt apt to bring them on, and hot and dry ones to increaſe their force, and taking notice of the unfriendly and ill-conditioned nature of Autumn, and that the Spring is the moſt healthful ſeaſon of all, he with great obſervation, penetration, depth of medical knowledge and ſagacity, obſerves, that in conſtant, natural, regular ſeaſons, and a temperate ſtate of the elements, Diſeaſes come on that conſiſt well, that is, are of a conſiſtent and regular nature, and paſs eaſily off; and that in inconſtant, uncertain, and irregular ones, thoſe that neither well conſiſt, nor have eaſy diſcharges; declaring the ill-conſequences of the latter, and laying down thus the cauſes, nature, and effects of Diſeaſes, particularly Fevers, ſo far as they are brought on, and their efforts regulated by the ſtate of the Air, in a few words.

After this, he with great propriety, enumerates the various methods which nature uſes, to carry off foul ſerous humours, rendered ſo tenacious, acrid, and even corruptible, through extraordinary heat, as to become infectious, and peſtilential, by throwing it on the ſurface of the body, in eruptions on the ſkin, efflorescencies, &c. in the beginning, and by deſquamation, &c. in the latter end of Fevers; and alſo the various other ways ſhe takes for diſpoſing of it, by diſcharges from the emunctories of the body, &c. thus characterizing many Diſeaſes of the peſtilential

lential kind. And the remaining part of what is very valuable in this excellent book, as deſcriptive of a ſupervening, and compleat peſtilential ſtate, exiſting at the ſame time, in two different parts of Greece, is the deſcription of the peculiar ſtate of the Air at Perinthus, and of the irregular nature of the Diſorders, that, in conſequence, aroſe there at that time under it, and the relation of Caſes in it, and the beginning of the third; ſome of which perhaps happened in Cranon, but others certainly at Perinthus, and in the iſland of Thuſus, before the coming on of the immediately conſequent general peſtilential Conſtitution, deſcribed in the latter.

Now conſidering the immediate connection this book evidently enough hath with the firſt and third, it is truly wonderful that Galen and alſo one of our Countrymen took them for detached pieces. Friend pointing out the two latter as more perfect parts of medical writing, in the Epidemicks, worthy of great ſtudy and attention, and as if the three books had no intimate union, nor even any connection, with each other.

After premiſing thus much, concerning the local peſtilential ſtate deſcribed by Hippocrates, and the three preceeding ſtates, or conditions of the Air, preparatory to it, I ſhall now proceed to ſhew that, in like manner, after a long continued moiſt, and impure ſtate of the Atmoſphere, productive of putrid Diſeaſes near thirty Years, and preceeded by the violent extremes, and great changes of the very hot Summer of 1775, and ſevere Winter following it, the hot Summer again of 1776, and remarkably cold Year of 1777, in which old people began to drop off very faſt, all of which were preparatory to it, a local peſtilential ſtate came on in the center of England, and the ſcarlet Fever and ſore Throat broke out in the very hot town of Birmingham, in the beginning of May 1778, and continued, during a courſe of very hot and dry weather, all that Summer. The Diſorder ſhewed itſelf alſo in ſome of the neighbouring Towns, where the ſun's rays were reflected from a dry ſandy ſoil, and gravelly bottom; but it raged with the greateſt violence, and its moſt fatal effects were felt

felt in the former place, where the heat was not only reflected, but concentrated, and the circulation of Air imperfect.

Though this highly peſtilential Diſorder, and the intemperate ſtate of the Air producing it, at firſt were local, like that which occaſioned ἀνθρακες in Cranon, deſcribed, as already mentioned, by Hippocrates, in the ſecond book of his Epidemicks, yet this local peſtilential ſtate was not temporary, nor went entirely off in the Winter, as that did. For the great heat of the Summer had ſuch an effect upon the ſucceeding ſeaſons, that the following Winter was remarkably mild and open; little rain falling from the great rarefaction of the Air. Though, by reaſon of the great quantity of vapours which roſe from the earth, and were neceſſarily condenſed, in this cold ſeaſon, and floated in the Atmoſphere, it was often ſo full of them, and thoſe ſometimes very near the earth, that the ſun was, at times, obſcured, for many days together. So that, though the Diſorder abated much in the Winter, it did not go wholly off, but appeared, in a few inſtances, in ſeveral places, even during this colder ſeaſon of the Year. The ſpring alſo was uncommonly warm, and, in the ſucceeding ſeaſons, the Diſorder ſpread through England and alſo into Scotland.

This local peſtilential ſtate, whoſe intemperature was ſo great, and the Air ſo full of the particles of light or heat, as, in the abſence of the ſun's rays, to bring on ſeveral times, on nights, a fiery kind of an aurora borealis, riſing from the horizon, on all ſides, and meeting vertically in a center, evidently conſiſted of an hot, dry, and alſo impure Atmoſphere, and the want of rain, and fine moiſture, or dews*. For the accumulated foul vapours of former years, during the putrid ſtate, being ſuddenly rarified by

* If we refer to the deſcription of the Peſtilential Intemperature, brought on by divine interpoſition in Egypt, we ſhall find that aſhes of the Furnace miraculouſly multiplied, and ſpread through the Air, were both the ſign and cauſe of an hot, dry, and foul ſtate of it, productive of the boil with blains, a kind of carbuncle.

great

great heat, and the finer parts evaporated and carried higher, left a groſs kind of impurity behind. So that, notwithſtanding the great force of the ſun, for many weeks, or rather months, the Air never grew pure, but was always ſubject to ſome degree of an hazy foulneſs. It being at the ſame time, ſo rarified and the ſky ſo locked up, that rain in general did not fall freely down, neither in this, nor the following year.

And perfectly ſimilar to this ſtate, was the effect produced by it on human bodies. The groſs humours gathered together under the putrid Conſtitution, and accumulated in the habit, eſpecially thoſe of Women and Children, under a relaxed ſtate of the veſſels brought on by it, being ſuddenly with the whole maſs of blood, for want of due attenuation and ſecretion, and a tolerable degree of purity and ventilation, ſo heated and rarefied, as to force the latter out of its proper channels, and make it appear all over the ſurface of the body, in ſcarlet efflorescencies. The internal membranes alſo partook of the Diſorder; the throat grew ſore, and upon inſpection, exhibited a very inflammatory appearance, totally different from the pallid hue of the putrid one; and proceeding from the great heat of the impure ſtagnating humours, and highly rarefied vapours in the body, ſimilar in ſome meaſure, to what happens even in the plague itſelf; cauſing ulcers, gangrene, and ſloughs. Nay the acrimony of the ſuddenly heated and retained foul juices, tending to diſſolution and putrefaction, in ſome caſes, was ſo great, as to bring a violet kind of colour on the ſkin, and afflict ſome with ſuch reſtleſſneſs and inquietude, and other violent ſymptoms, that the perſons ſuffering under them grew clamorous, and died in extreme torment and anxiety. Some had black ſpots upon them before death. And in many of thoſe who recovered, in all of whom the cuticle ſeparated, and ſometimes the nails, the Diſorder for want of due diſcharges, became ſubject to a chronical termination, and dropſical tendency, which required the tenacious foul humours to be carried off by the force of calomel, and the tone of the

fibres to be reſtored by powerful corroborants, ſuch as the Bark with ſteel.

The virulent nature of this highly peſtilential Diſeaſe was ſo great, that people were ſeized with it in three days after receiving infection. And with it aroſe a burning Fever of a peculiar kind, which followed the type, or remittent form, of the putrid Fever of the preceeding conſtitution: this putting off by degrees, as it were, its own nature, and becoming eſſentially different in all other reſpects. For the fleſh was more hot, and the ſkin more dry, in this than in the putrid Fever. The tongue alſo, inſtead of being white and moiſt, was brown and dry, with a great degree of thirſt; and the heat of the breath ſometimes ſo great, as to be diſtinguiſhed by a perſon coming freſh into the room, at a good diſtance from the affected one. I am therefore the more ſurprized, notwithſtanding a ſimilar remiſſion in the day time, in both, and an increaſe of febrile ſymptoms in the night, that theſe two Fevers ſo eſſentially different in themſelves, ſhould have been ever ſince, in general, ſo univerſally confounded together, and too often treated with a ſimilar method. For what was proper, or at leaſt tolerable, in the putrid Fever, particularly the uſe of Bark and quantities of Port Wine, was highly detrimental, nay often deſtructive in this, at leaſt in its beginning, and during its increaſe and violence.

The peſtilential Fever of 1778 with ſore throat, a ſymptom or diſorder peculiar to Peſtilencies, and attendant on the plague itſelf, κατα καυσον *Græcorum*, or following the nature of the burning Fever of the Greeks, required to be treated with a moſt cooling method; the ſick calling out for cold water, oranges, and every thing that abated internal heat. It was alſo neceſſary to let the Air have a free circulation in their chambers. Nor could they ſometimes bear a ſpoonful of Wine diluted with a good portion of water without complaining of the internal heat it occaſioned, and the pain in the head ariſing from it, even when great lowneſs and weakneſs had come on, in the decline of the Diſorder, and they were ſo reduced, as to require the

the uſe of it to ſupport them under it. And even in the violent fluxes by the bowels, that ſometimes came on about this period of it, it was often neceſſary to temper it with vinegar. Alſo in ſome violent caſes of the ſcarlet Fever, or that attended with efflorescence and eruption, the internal heat was ſo great, that though the windows were open, and the room properly diſpoſed for the free influx of the Air, yet ſome Patients could not even then bear the ſlightest covering. The ſmall veſſels of the eye alſo in ſome were ſo filled with blood, that forced itſelf into thoſe not appointed for its reception, that the cornea in them became as red as thoſe of Ferrets*. And the brain and its membranes undoubtedly, in many caſes, took a ſhare in the general Inflammation.

In the treatment of this latter Diſorder, though bliſters ſeemed to be called for, they often did miſchief, by increaſing heat and irritation. Nothing in general was found ſo eminently uſeful in it, as early and repeated vomits: and even in advanced caſes, they relieved often, under the greateſt exigency. A vomit in the beginning was alſo of the greateſt uſe in the burning Fever without eruption above deſcribed, and alſo ſaline aperients with Rhubarb, at proper intervals. For through the diſcharge, by theſe means, of part of the offending matter, and the abatement of heat in conſequence thereof, a general diſſolution of the humours, producing ſometimes a fatal flux by the bowels in the cloſe of the Diſorder, was often prevented. But every heating, irritating, and alſo confining method, by the uſe of the Bark and Port Wine, was in general bad: as, on the other hand, was that of reducing the Patient too much in the beginning of the Diſeaſe†.

* See Doctor Withering's deſcription of the Diſorder, in his Treatiſe upon that ſubject.

† A medical Gentleman has informed us, that he relieved his Patients in the ſcarlet Fever by bleeding and purging. But however uſeful ſuch a method might be, in the more northern ſituation, and cool and bracing air of Scotland, where he practiſed, it was by no means to be uſed with ſucceſs, as the Diſorder raged, and was circumſtanced in the Year 1778, in the interior parts of England.

It is worthy obſervation, that the burning Fever without eruption ſometimes hung on for two or three months, and that the tenacious matter occaſioning the efforts of it, would not ſeparate and go off, till it ultimately fell upon the lungs, and was there concocted and diſcharged by a plentiful expectoration. As to all other matters relating to its nature and treatment, I muſt refer the reader to my Treatiſe on that ſubject.

Attendant on this local peſtilential ſtate were the acute Rheumatiſm †, Dyſentery, ſmall Pox of a bad kind, Meaſles and Chincough: and alſo of chronical Diſorders, many Conſumptions, Dropſies, and Palſies, from the influence of the ſame Atmoſphere.

## CHAPTER II.

### *Of the General Peſtilential Conſtitution, in the Year 1779.*

THE great heat of the Summer of 1778 had ſuch an effect, as I have obſerved, on the next Winter, that it was mild and open throughout, though ſo abounding, at times, with vapours, that the ſun did not make its appearance for a fortnight; rain ſeldom falling, except a few

† A young Gentlewoman treated with the Bark and Opiates, in a caſe of this kind, loſt the uſe of one Elbow, by a perfect Anchyloſis, and was very near loſing her life.

drops

drops or in ſmall quantities, and for the moſt part in the form of miſts. In the ſpring likewiſe the March winds did not blow, with their uſual ſharpneſs and ſeverity; nor was there any weather, that could be called cold, till towards the latter end of April; when there were ſome froſts, in the night, very ſharp indeed, followed by ſome cool weather, in the remaining part of that month, and the beginning of May, which gave ſome check to the extraordinary warmth of this ſeaſon, at leaſt a month forwarder than uſual; not however ſo great a one, but that, in conſequence of the gradual increaſe of warmth, there was ſome exceeding hot weather, in the following Summer, particularly during three days in July. When with a burning ſun, and clear ſky, dry weather, and no circulation of Air, the heat was ſo intenſe, as to keep people who ſat in the houſe, with the doors and windows open, in a continual ſweat†.

The common Thermometer of 90 degrees, roſe at this time up to 77. But after the heat of the Summer was over, the air in Autumn was more temperate and natural for that ſeaſon, till the ſetting in of cold weather, which was pretty early this year, in the latter end of November, it continuing through December and January. In this Winter ſeaſon, through great moiſture and a foggy foulneſs in the air, ſuch as I never before obſerved to be in the laſt month, joined with a generally clouded ſky, the weather

† In the middle of the laſt of theſe exceſſively hot days, a moſt profuſe flux came on immediately after parturition, in a Woman who had been uſed to drink pretty freely; the fatal effects of which were prevented, by the timely uſe of the cold applications, recommended in my Treatiſe on the Peſtilential Conſtitution of 1778. —This is one of thoſe dangerous Diſorders, peculiarly attendant on putrid, and peſtilential Conſtitutions. And by the ſudden violent diſcharge of an heated, acrid, putrid, and diſſolved blood, in ſuch caſes, many Women, for want of the immediate uſe of proper powerful methods to reſtrain it, as well as ſupport them under it, have loſt their lives. There is a great error now very prevalent with many Practitioners, that of neglecting drawing away a little blood, at a proper diſtance of time before delivery; which would not only enable Women to uſe due moderate exerciſe with ſafety, even to that time, but alſo be productive of eaſy labours, and generally prevent thoſe dangerous conſequences that too often otherwiſe happen in them.

was exceeding raw, ſevere, and pinching, and withal extremely changeable, and unſettled; the predominant moiſture in the atmoſphere frequently diſpoſing it to thaw in the day, though it froze very ſharply in the night, eſpecially after any little fall of ſnow or rain. Nay the weather was ſo various and compounded, as it were, through different temperatures, in the ſeveral regions of the atmoſphere, that it ſometimes rained, while it froze ſharply on the earth. And what is very remarkable though the air did not feel ſharp, and the froſty weather was not nearly ſo intenſe, as I have known in many former years, yet the real coldneſs of it ſunk the common Thermometer down to 13: it being juſt in equilibrio in the cold ſeaſon, with what it had been in the hot one, and falling in the Winter as low in proportion, as it had roſe in the extraordinary heat of Summer. Such was the nature of the Year 1779, conſiſting of high and low temperatures, and abounding with foul vapours. The Spring uncommonly warm and unſeaſonable, the Summer intemperate, and the Winter compounded of various kinds of weather, but though changeable, ſevere.

Agreeably to the unnatural warmth of the ſeaſon, bad burning Fevers, attended with not only great langour and weakneſs, but alſo dejection of ſpirits, began to ſhew themſelves early in the Spring*. And when the Summer came on, the ſcarlet Fever and ſore Throat, ſpread itſelf in England, and alſo into Scotland. While the center of the kingdom where it firſt broke out, and which felt its ſeverity laſt year, was almoſt free from it, and, on the whole, healthful in compariſon of other places. A direct proof, that retained, and accumulated tenacious, acrid matter, which had been diſcharged from the conſtitutions of many perſons, by former efforts, the preceeding year, is the grand prediſpoſing cauſe to diſeaſe, under any conſtitution. Its ill effects being aided, by relaxation and debility, general and particular, and often brought on more ſud-

* In a lingering caſe, even an old Woman had impoſtumes in the armpits; but through the quantity of tenacious corruptible matter in the body, and inability through age, they did not prove critical, but ſhe gradually ſunk under the Diſorder.

denly

denly in a peculiar form and manner, and alſo ſometimes raiſed to a great height, by intemperate heat and cold, and an impure air.

As the Summer advanced, the burning Fever appeared in ſo malignant a form at Adderbury, a little Town near Banbury in Oxfordſhire, that it was called the plague, for the peſtilential putrefaction attending the Diſorder, was ſo great, that it deſtroyed ſeveral perſons in leſs than twenty-four hours. Six were known to have been buried in this ſmall place in one evening, and fifty were ſaid to have died there, in the ſhort ſpace of five weeks. About the ſame time a peſtilential Diſorder, in the form of a Fever and Flux, ſo raged at Breſt, on the coaſt of France, that according to accounts received, 1400 out of 2000 Engliſh Priſoners died of it, in the Priſons there; and ſo contagious was it, that moſt, if not all the perſons of the Faculty who attended them, were ſaid to have dropped off likewiſe. But this fatality was nothing in compariſon with what ſoon after happened in the French and Spaniſh Fleets, in their voyage to, and when before Plymouth. For the Ships being foul, and alſo full of men, the Diſorder raged ſo among them, that many thouſands died of it. Report then ſaid, not leſs than 10,000, while other accounts raiſed the number to 20,000. Such were the dreadful effects of the extraordinary intemperature of this ſeaſon And thus a little more to the South, fell the weight of the great deſtruction, attendant on the much increaſed violence, of the peſtilential ſtate of this year.

The uncommon heat of weather this Summer, had ſuch an effect on foul habits, by rendering the groſs humours more tenacious, and diſſipating the finer parts, that towards the latter end of it, or the beginning of Autumn, many began to have ſcabby faces and eruptions on the body*. And when the cool weather came on, and theſe foul humours were thrown inwardly a kind of Influenza

* A whole School of Boys was thus affected, except two or three, who had lately had the ſmall Pox in the natural way.

prevailed, and the burning Fever began to be complicated with a Peripneumony: a Diſorder which had made its appearance before in the Summer, and that aroſe in this form, this very Year. Not even in an Inflammation of the lungs however, joined as it was with a burning Fever, under the preſent Intemperature, was there in general much indication for bleeding†. Therefore, by reaſon of the quantity and ill quality of the matter thus determined to, and impacted on the lungs, its ſtrong tendency to quick putrefaction, the want of ability to bear proper evacuations, eſpecially by drawing blood, and the want of time for an expectoration of it to come on, the Diſorder was often ſoon fatal; a gangrene probably coming on attended with a corruption of the whole maſs of blood.

In the variable, cold, foul and raw weather, in the Winter, the tenacious, corruptible matter was determined to the bowels, and an acute Dyſentery appeared. Here the local Diſorder was in the bowels, inſtead of the lungs, but the original diſeaſe the burning Fever was the ſame in both. I have already obſerved that an acute Dyſentery attended the peſtilential ſtate of 1778, and that great numbers died, on the coaſt of France, and before Plymouth, of a fever and flux this Summer. But this peſtilential Dyſentery was epidemic in the ſucceeding Winter, and therefore of a very peculiar kind, from the force of two extremes; the foul humours rendered fizy by the preceeding intemperate heat, being now confined by cold. Hence the uſual difficulty in parting with them was much increaſed; ſeveral died of the Diſorder; others were much tortured by it; and it was apt to hang on long. It was chiefly fatal to perſons beyond the middle Age, whoſe juices are grown tenacious, and difficult of ſeparation; and to children; who from the natural weakneſs of their bowels, and

† This may ſhew Practitioners, that the mere diſtinction of Diſorders by names, knowing this or that kind of Fever, or where an internal inflammation is ſeated, will not enable any man to treat them with judgment; and that without good obſervations on the reigning conſtitution of the Air, and its influence upon human bodies, no good knowledge, in the theory and practice of Phyſic, can be obtained.

Con-

Conſtitutions in general, were unable to bear the violence of the Diſorder.

It is very peculiar however, that notwithſtanding the violence of this complaint, and the great difficulty of getting off the offending matter, moſt perſons, even in its worſt ſtages, had a regular natural ſtool daily. But nothing ſhews its extraordinary nature in ſo ſtrong a light, as the great variety of the effects of medicine, in different caſes. For what was beneficial to, and relieved one perſon, had no good, or an ill effect on others. A vomit of Ipecacuanha in the beginning of the Diſorder ſometimes appeared to be uſeful, at others to weaken too much, and reduce the Patient. Infracted doſes of it and Rhubarb, generally uſeful in other Dyſenteries, by reaſon of the very irritable ſtate of the Inteſtines, could hardly be borne at all, at leaſt in any tolerable doſe, and the latter only in the ſmalleſt. The medicines moſt uſeful were decoctions of Tamarinds, after Zimmerman's method, or whatever reſiſted the peſtilential halitus, and putrefaction, tempered heat, and abated acrimony. As the fixed Air ariſing from alkaline ſalt and vegetable acid, taken in the act of effervescence, and oil of olives, mixed with juice of lemons. And when theſe did not anſwer, and nothing but the actual ſeparation, and diſcharge of the peſtilential tenacious, putrefying, acrid matter, would relieve, a ſmall doſe of calomel, joined with a gentle cordial, and a few drops of Thebaic Tincture, would ſometimes prove beneficial. Which alſo, if given early, after the uſe of an emetic of Ipecacuanha, in ſome proper caſes that would bear it, would ſometimes put an effectual ſtop to the progreſs of the Diſorder. And it is very remarkable of this medicine, thus judiciouſly given, that it never ſeemed to irritate the inteſtines, or increaſe the bloody, ichorous, and ſometimes fœtid, and very offenſive diſcharge, but on the contrary, gave ſubſtantial relief to the patient, increaſed the ſize of the ſtools, and thickened their conſiſtence. Nor upon due conſideration, does any thing appear extraordinary in this. For as the diſorder is attended with great obſtructions in the coats of the inteſtines, from moſt tenacious matter determined to, and ſticking in their

their veſſels, what opens them, attenuates and diſcharges it, muſt be the moſt effectual method of cure; as I have frequently had occaſion to remark, in the ſucceſsful uſe of it in leſs difficult caſes.

Whatever method of cure however was inſtituted, and it was moſt difficult to fix on any at firſt, as I have already obſerved, that would anſwer, the uſe of light ſolutions of Gum Arabic, and of broth Clyſters, made a neceſſary part of it; and by ſuch means, with ſome of thoſe above mentioned, many were relieved. But there were ſome caſes of ſo fixed a nature, ſo obſtinate and dangerous, that nothing ſeemed able to reach, or proved the leaſt beneficial in. In a few of the beſt, perſpiring towards the end of them proved a ſubſtantial relief, and ſolved the diſorder. But ſome of thoſe who recovered from others, were ſo harraſſed with violent pains, and the long continuance of the Diſeaſe, as to be perfectly emaciated and worn out; nor gained relief at laſt, but by length of time, and the gradual though ſlow decline of it.

The Agues and intermittent Fevers of this year were not only peculiar and bad, by reaſon of the quantity of foul humours collected in ſome bodies, during a warm winter, and their proving epidemic in bad ſituations, through the whole Year, but alſo as following the general peſtilential nature of the continual Fevers, and being wholly deſtitute of, or having very difficult criſes. Becoming therefore tedious caſes, and hard to cure, eſpecially if the Bark was injudiciouſly given early. The very tenacious matter of the diſeaſe being apt to ſtick in the fine veſſels of, and produce obſtructions in the Liver, and glands of the Bowels; leaving thus a chronical Diſorder behind it, or at leaſt a diſpoſition to it. Hence the propriety of the uſe of Vomits, and aperient medicines, and a doſe or two of Calomel, by way of attempting to diſlodge, and diſcharge ſuch viſcid humours, and bring forward or compleat the criſis, before giving ſo aſtringent a medicine, is fully evident, as well as that of poſtponing the uſe of it as long as poſſible; that by obviating all difficulties beforehand, the danger of returns,

or

or of other conſequent Diſorders, might be prevented. And if the Liver was already affected, obſtructions formed in it, or the bile ſo viſcid that it would not flow, that it was abſolutely neceſſary, by the uſe of aperient medicines, ſaline, ſaponaceous, and vegetable detergents, and ſometimes the uſe of Calomel, or ſome other proper method, to remove ſuch obſtructions, give liberty to the veſſels, and promote a free circulation in them, before the adminiſtration of conſtringing medicines of any kind, need not be inſiſted on.

Such, as above deſcribed, were the very ill effects of the dangerous, obſtinate, and lingering Diſorders, attendant on a very cold, changeable, and moiſt Winter, following two very hot and dry Summers. We have however hitherto had chiefly to do with the deſcription of the powers of the latter, in bringing on and confirming peſtilential ſtates, as is the general caſe. We ſhall however have occaſion now to take notice, that unſeaſonable cold weather and great moiſture, are concerned, as well as intemperate heat, in the continuance and increaſe of them.

Some perſons died of Apoplexies, and the Gout;* and chronical diſeaſes, went on as in the preceeding Year. Perſons however in Declines, after the very cold weather in the latter end of this, and that in the following Year, began to have remarkably pallid countenances, and a very unhealthful look, and alſo thoſe labouring under other chronic Diſorders.

* A remarkable caſe, wherein both theſe Diſorders were complicated, happened in a Gentleman, rather in the decline of life, who having had a fit of the Gout, came down as uſual after it, thinking himſelf well. So little of the gouty matter however had been diſpoſed to ſeparate, or was then diſcharged, that he had an attack on the brain, and died of an Apoplexy, that very day.

CHAPTER

# CHAPTER III.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1780.

AS laſt year was remarkable for uncommon warmth in the Spring, a month forwarder than uſual, and exceſſive heat in the Summer, that of 1780, following the cold raw nature of the preceeding Winter, was as remarkable *tempeſtatibus non tempeſtivis*, taken notice of by Hippocrates in his Epidemicks; an exceeding raw, cold wind, blowing from the north-eaſt, through the greater part of both theſe ſeaſons, and making them a month, or ſix weeks, backwarder than common. The month of February indeed was tolerably mild and temperate; but from thence even to the end of June, cold and alſo dry weather predominated, nor did the latter month grow warm, nor the weather open in it, as in former years.* Nay a north-eaſt wind reigned through July, and even to the middle of Auguſt, in the hotter parts of the year. And yet, notwithſtanding all this, by reaſon of the general foulneſs of the atmoſphere, the quick, ſearching, pure, and ſalubrious air, and weather of March, was wanting to this year; and there was alſo a great deficiency of dew. It is true, this very cold weather

* Even ſo late as the 26th of May, and in the ſouthern parts of England, there was a moſt ſevere froſt, for that ſeaſon And four hours after ſunriſe, though it ſhone out bright, Farenheits Thermometer ſtood at 46. The 28th it was at 75, and on the 29th, at 2 in the afternoon, in a ſituation well placed for obſervation, it was at 81, the greateſt heat of 1778 The next day, at the ſame hour, and in the ſame ſituation, at 57. See White's Natural Hiſtory of Selbourne.

was

was ſometimes interrupted, by ſome exceeding cloſe and hot, with the wind in the oppoſite point the ſouth-weſt. For the intemperature of laſt year ſtill went on, and there was great heat in the air at times; but though theſe fits were violent, they were of ſhort duration. For, beſides an intemperate and unhealthful ſtate of the air, not only in reſpect both of heat and cold, but alſo foul vapour, the weather began now to be ſubject to frequent, and ſudden changes†. This year alſo there began to be violent and deſtructive hailſtorms.

By reaſon of the exceſſive coldneſs in the preceeding ſeaſons, the cold weather began to ſet in this year, as early as the latter end of September: this being ſucceeded by the autumnal rains, more or leſs of which fell every day for three weeks together. And during this time, or ſoon after, cold and groſs vapours became ſo predominant in this ſolar ſyſtem, that the due returns of light were not made as uſual, and there was ſo great a defect in the preparation, or return of it, the abſorption of luminous particles into the ſun, and conſequent emiſſion of its rays, that ſeveral black ſpots, much larger than thoſe frequently ſeen, were, by the help of Teleſcopes, obſerved upon its body. And one in particular, gradually formed itſelf, of ſo enormous a ſize, as to be equal to a tenth of the ſun's breadth.

This remarkable Phœnomenon was ſucceeded by tempeſtuous northerly winds blowing raw vapours, and having an uncommon degree of auſterity. And after theſe were great falls of ſnow, towards the latter end of Autumn, and in Winter. Alſo much rain fell in the month of December, and likewiſe even in January. At other times a cold, raw wind, blew a foul vapouriſh miſt, ſometimes out of one, and ſometimes out of another, of each of the four cardinal as well as other points: the vapours and foggy foulneſs ſtagnating ſo in the Air, in calm weather, that the ſun and ſtars did not make their appearance ſometimes for a fortnight or three weeks together. And by means of

† See the Note in the preceeding Page.

this

this extraordinary moiſture on the one hand, and of cold on the other, the weather became ſo changeable, ſometimes freezing and then ſuddenly thawing, and ſubject to ſuch ſtrange variations, and ſo mixed and complicated, that it ſometimes froze, thawed, ſnowed, hailed, and rained, all in the compaſs of 12 hours. And yet by reaſon of the foggy ſtate of the Atmoſphere, the Winter could not be called ſevere, on account of any great effect it had upon Plants; which flouriſhed all through it, notwithſtanding the pinching rawneſs of the Air. So much of the remarkable nature of the decline of this year, of which I ſhall again take particular notice in the next.

The effects of this extraordinary intemperature were great; as might be expected from its unſeaſonable, inclement and inconſtant nature, and the great impurity of the Atmoſphere.

Theſe ill effects were ſeen in the continuance of lingering and ill-conditioned Agues and Fevers deſtitute of criſes, and attended with the greateſt debility. And in the unſeaſonable cold weather in the latter end of June, many elderly perſons dropped off in Apoplexies and Palſies. After this, in the middle of Summer, Fevers were remarkably obſtinate, long-continued, and difficult of diſcharge; infections, attended with inexpreſſible foreneſs all over the body on the firſt attack; and perſons apparently recovered from them, were ſubject to frequent relapſes*. Such was the ſtate of Diſeaſes in the Spring and Summer§.

But though Diſeaſes raged in this manner, in many places, their attacks were not ſo numerous in the internal parts of the kingdom, about us, till the Autumn and Win-

* In a child, though it perſpired freely after the paroxyſm, and the Fever ſeemed to abate and be going off, it conſtantly recurred, till after many ineffectual efforts to attenuate and throw off the tenacious matter, worn out at length it died comatoſe.

§ This Summer, as in the laſt, there was ſaid to be a great mortality in the Spaniſh Fleet, and alſo among the Engliſh Sailors and Soldiers at Chatham.

ter,

ter, when the tenacious matter, prepared and retained by the inclemency of the Spring and Summer, was accumulated and began to abound in unhealthful bodies, and was withal greatly diſpoſed to putrefaction. Then indeed Fevers became very epidemical. And before this, in the beginning of Autumn, ophthalmies were very common, and many ſubject to Boils†.

The Air by the middle of Autumn was ſo exceſſively cold and raw, and had ſuch an uncommon degree of auſterity, as to ſeem almoſt capable of curdling the humours which have little or no motion‡.

About this time, after a dreadful tempeſtuous thunder-ſtorm in and near London, in which the lightning, in an uncommon, awful, and tremendous manner, ran along upon the ground, that city and its environs were ſtruck with the peſtilential Dyſentery.

In the latter end of Autumn, and in Winter, for burning Fevers continued through the whole Year, many fatal caſes occurred: perſons affected with them often dying in four or five days, and ſometimes in two. The Diſorder being attended with ſuch a corrupt and even cadaverous ſtench, and that before death, in Workhouſes and other confined places, where many perſons lived together, and there was not a free circulation of Air, as could hardly be borne by perſons who viſited them. The Meaſles alſo which had been epidemic for ſome time, and attended theſe peſtilential burning Fevers, as the Small Pox and Chin-

† I ſhall have occaſion to make ſome remarks on the change of theſe Diſorders from external to internal impoſtumes, in my future obſervations on the continuance and increaſe of the Peſtilential Conſtitution in ſucceeding years.

About this time a bad gangrenous eryſipelas occured, from which the Patient, being young, recovered.

‡ A Woman afflicted with the colic, ſaid what ſhe vomited up, had the taſte of Alum; ſo great an effect had the Air upon the foul humours.—And a young Man about 25 Years of age, by travelling in a Waggon, had an attack of a Fever complicated with a paralytic ſeizure in one leg, attended with a convulſive twiching.

Cough

Cough did the Scarlet Fever and Sore Throat, became now very fatal in large Towns.

In the attacks of Fevers, in the very cold, raw, and damp weather in the Winter, many complained of a peculiar kind of coldneſs, ſimilar to that of being wrapped in a wet ſheet‡. This ſenſation continued frequently for 24 hours and in ſome extraordinary caſes, for three or four days. Agues were epidemic at this time, ſeveral perſons had the Jaundice, and ſome were attacked with inflammatory obſtructions in the Bowels, under the regulation, as is always the caſe with ſuch Diſorders in general, of the reigning conſtitution and Fever produced by it*.

In the latter end of Fevers many became ſubject to Coughs, the morbid matter falling ultimately on the lungs for diſcharge. For they were very uncritical, apt to re-

‡ A Man who had been ſubject to a cough for ſome time, was attacked with this peculiar univerſal coldneſs attended, with a difficulty of breathing, and ſo great a langour, as no cordial could relieve: nor had attenuants any better effect, in preventing the general ſtagnation and putrefaction, that came on ſoon after.

A Gentlewoman of a middle age was alſo attacked with this coldneſs on the coming on of a Fever. She had had one before in the Summer, attended with the Jaundice, and ſuch an irritable ſtate of the bowels, ariſing from an inflammatory diſpoſition of the fibres, brought on by the intemperature of the Air, and the unfriendly effects of tenacious heated humours, and ſuch a want of mild, balſamic principles in the blood, that neither mercurials nor cordials could be borne; Rochelle Salts and Rhubarb only agreeing with her, or ſome ſuch cooling aperient. Nor did ſhe get the better of this feveriſh indiſpoſition till ſhe afterwards, in the Summer, had a Fever with a ſore Throat, attended with the diſſolution and diſcharge of the tenacious, acrid matter by impoſtumation. In the preſent attack Rhubarb with Tartar of Vitriol, and antimonials with camphire agreed well with her, and gave her relief: and after this ſhe had a pretty good ſtate of health for ſome years.

During this Winter ſeaſon, a perſon of a middle age died after an ineffectual effort of the Gout; the gouty matter returning from the extreme upon the ſtomach and internal parts, through an inability of nature to attenuate and diſcharge it.

* A Gentlewoman in the decline of life, when apparently much relieved by looſing a little blood, and the uſe of a doſe of Calomel. in an inflammation of the bowels, ſunk away and ſoon died upon an injudicious repetition of bleeding.

turn,

turn, and in the end prove fatal, at leaſt by terminating in chronical Diſorders.

In conſequence of the very intemperately cold, raw, and damp nature of this, the Fevers of the riſing year, which came on ſoon after its beginning,* were marked with a new ſymptom, or rather appearance, namely, that of an uncommonly heavy look of the eyes; which, and an oppreſſed pulſe, have been characteriſticks of the reigning burning Fevers, both continual and intermittent, ever ſince; as well as criterions whereby to judge, of the various degrees of oppreſſion therein, and the malignity thereof. For in ſome the attack was ſlight, and the Diſorder went eaſily off, but in others was accompanied with a great degree of violence and obſtinacy†. And not only great langour attended them, but now alſo dejection of ſpirits; a tendency to both of which there was in all, even in the mildeſt.

Among chronical Diſorders this year, there were ſeveral caſes *Choreæ Sancti Viti.* Inſtances of Inſanity ‖ alſo began now to be very common, and likewiſe Cancers.§

* See Hippocrates's deſcription and account of the time of the riſe of Fevers in Statu Peſtilenti.

† A Man, by imprudently going out in the beginning of a Fever, was laid up of it two months, attended with comatoſe ſymptoms; and ſo greatly reduced towards the end of it, that it became neceſſary to ſupport him by the uſe of a light Decoction of the Bark. But even under theſe exigencies, it was not given, till after the uſe of attenuants and even Calomel itſelf, in ſmall doſes, and the conſtitution had alſo received ſome relief naturally, both by the bowels and the ſkin, in the courſe of the Diſorder.

‖ A Gentleman affected with an hereditary Diſorder of this ſort, after receiving relief from the uſe of Cheltenham Water, upon uſing Sea-bathing afterwards by other advice, had a return of it, and has remained in a ſtate of Inſanity ever ſince. And a Woman between 40 and 50 years of age, afflicted with the ſame Diſorder, after uſing cold bathing long ago, remained in the ſame unfortunate condition for ſome years, and has been ſubject to to frequent fits of Inſanity ever ſince.

§ A Gentleman of an highly ſcorbutic habit ſubject to violent attacks of pain in the head, who had injudiciouſly uſed the cold Bath and the Bark formerly for it, without taking proper means to diſcharge, or at leaſt leſſen the radical cauſe of his Diſorder, had now, in the decline of life, a flux of cancerous humours to an Iſſue in his arm, which proved ſoon fatal.

There were alſo many Conſumptions,‡ and in the Winter Aſthmas†.

## CHAPTER IV.

### *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1781.

THE inclemency and intemperature, unſeaſonableneſs and irregularity of the four preceding years, went on and increaſed in this; and all kinds of bad weather not only abounded, but were mixed in an uncommon manner in it. But though the air was ſubject to frequent changes, and the wind varied through all the points of the compaſs, and there were unwholeſome, tempeſtuous, cold, raw winds, and great falls of weather out of all of them, yet they came chiefly out of the weſtern points. And though there were ſudden tranſitions into oppoſite ones, ſometimes two or

‡ A young Gentlewoman who had lately loſt both her Siſters by hereditary conſumptions, and who herſelf was attacked with a violent Teneſmus, ſhewing the efforts of nature to diſcharge the tenacious, acrid matter, which is the radical cauſe of thoſe diſorders, and was therefore in great danger of falling into the like complaint, upon opening an Iſſue by Cauſtic in one Thigh, received relief, and was reſtored to a tolerable though not perfect ſtate of health; which ſhe ſtill enjoys after marriage, and having ſeveral children. See my obſervations on the uſe of Iſſues, eſpecially in Peſtilential Conſtitutions, in my Treatiſe on that of 1778.

† In the middle of one of the hot days in Summer, a violent and dangerous flux after Parturition occurred, as laſt year, which was reſtrained by the ſame methods.

three

three times a day, and continual alterations of the weather from the unſeaſonably warm, cloſe, and intemperately hot, with thick miſts, and ſometimes ſtinking fogs, that infected the air, into the cold and raw, with a foul atmoſphere, and obſcure ſky, yet the power of heat ſo predominated, that the Spring and Summer came on early, and the whole year was quite different from the laſt; the great heat of Summer having ſuch an effect on its declining ſtate, that it was at times very warm in the middle of Autumn, and uncommonly ſo, for the ſeaſon, even in the midſt of winter.

This extraordinary year was preceeded *Autumno, obſcuro, nebuloſo, cum Aquarum abundantiâ*, as that productive of the peſtilential ſtate, deſcribed by Hippocrates, with a foul Atmoſphere; the natural conſequence of two ſuch hot and dry years, as thoſe of 1778 and 1779, and the laſt extremely cold one. And this obſcure and cloudy weather, with rain or ſnow, continued not only through the middle and latter end of Autumn, but the Winter alſo; there being hardly three fine days together, from the 9th of October to the beginning of February. And the tranſient gleam of fine weather which then came on, was ſoon followed by tempeſtuous weſterly winds, with great quantities of ſnow and rain; and afterwards in the returning Spring, by ſome unſeaſonably warm, and at times, very hot and cloſe, accompanied with light miſts, but chiefly by thick, ſtagnant, and ſometimes putrid fogs. This weather being interrupted by frequent returns of, and ſometimes ſudden tranſitions into, the cold and raw with a foul atmoſphere; and there being very few of the purifying winds, and little or none of the clear wholeſome air, peculiar to this ſeaſon of the year§.

§ Towards the latter end of March, one Evening appeared a remarkable Meteor, in the form of a luminous arch, ſtretching acroſs the hemiſphere from eaſt to weſt, ſhewing the predominance of the particles of light and heat in the air at this time. And that cold was alſo very powerful at others, we had proof ſufficient in having ſoon afterwards a day as cold as is uſual in the middle of winter. For the extremes of the heat of the Years 1778 and 1779, and the cold of 1780, ſtill went on attended with a foul atmoſphere.

As the Spring advanced the ſame weather went on, with frequent variations of the wind, though much addicted to the weſtern points, from one point to another all round the compaſs, and rain out of all of them, and frequent changes into oppoſites. In the latter end of this ſeaſon, however, the rains abated, and the earth grew dry. But this tranſient return of ſomewhat clearer weather, as in the beginning of February, was ſoon broke off by foul fogs, blown by the wind out of the eaſt, and the return of a foul, ſqualid, cold and raw air. And the Summer coming on very ſoon, from thence till after the autumnal Æquinox, there was a return, at times, of tempeſtuous weſterly winds with exceſſive rains, through great Summer heats; one evening the weather being as hot and cloſe, as that in the three remarkable days in the exceeding hot Summer of 1779, and keeping people, even out of motion and within door, in a continual ſweat. In fact the heat through Europe in general this Summer was ſo intemperate, that on the Continent in Hungary, it melted all the ſnow on the Carpathian Mountains, which had lain on them more than a century, and prevented people from labouring in the fields in the day time. But, what is ſtill more extraordinary, during all the exceſſive heat with us, there were, at times, ſuch returns of a raw, foul air, and ſuch a power of cold, that even in the middle of Summer, dreadful hailſtorms with pieces of ice, fell in Herefordſhire, for three days ſucceſſively, that cut every thing in the country to pieces; attended with violent lightning, and uncommonly loud thunder, almoſt inceſſant. So complicated, violent, and extraordinary, was the weather and ſtate of the air at this time, as if all the elements were at war againſt us.

After the autumnal Æquinox, cold, raw, and damp weather with an obſcure ſky, began to be more prevalent. However the great heat of Summer had ſuch an effect, as I have obſerved, on the declining Year, that the middle of Autumn was uncommonly warm, though foul. And though there were about this time, great rains in many parts of England, yet towards the end of this ſeaſon, there was a little clearer weather, as in the beginning of February and

and in May. But this was ſoon followed by tempeſtuous hail-ſtorms out of the weſt, ſucceeded by great falls of rain, and cold, raw and foul weather, mixed with the warm and cloſe.

In the beginning of Winter, as in Spring, there was a day of peculiarly ſevere weather, ſuch as is unuſual in this climate: but about the middle of it, it was, at times, warm for that part of the year. And though there were ſtorms of hail and ſnow, with tempeſtuous winds from the weſt, at others, yet they were accompanied with thunder even in this cold ſeaſon. Great quantities of rain alſo fell, both in the former and latter part of it; there being warm and cloſe weather, at times, and alſo cold and raw, with a foul atmoſphere and obſcure ſky, at others, ſuch as was common to the reſt of the year, but peculiarly prevalent in this latter part of it.

Every man capable of obſervation muſt be ſenſible, that this remarkable year, connected as it was with, and affected by the preceeding Autumn and Winter, bears a reſemblance to the peſtilential ſtate of Hippocrates, as far as it well could in this climate. It is true the conſtitution of it was not of a kind able to bring in ſuch numbers of peſtilential diſeaſes, under ſo many forms, with ſuch violence and on a ſudden, as that powerful one, which aroſe in the climate of Greece in which he lived, with its preparatory ſtates did, but by degrees; for this was the work not only of many preceeding, but alſo ſucceeding years. It however ſtamped a general form and likeneſs, in ſome reſpects, upon all the diſeaſes that have riſen in this climate ever ſince.

I have already taken notice that Fevers accompanied with a peculiar heavineſs of the eyes, which has been characteriſtic of them ever ſince, and alſo attended with great ſoreneſs all over the body on their attack, and not only an increaſe of langour but likewiſe dejection of ſpirits, but in no other reſpects as yet different from thoſe of the three preceeding years, aroſe in the very beginning of this year, long before the Spring as the burning Fevers did, deſcribed by

Hippocrates *in Statu Peſtilenti*. This was evidently owing to the great inclemency of the preceeding year, and particularly to the long continuance of cold, raw, foggy, and rainy weather, in the foregoing Autumn and Winter.

In the cold weather in the latter end of Winter and in the Spring, burning Fevers, in the form of the acute rheumatiſm under a peſtilential regulation, a Diſorder that appeared in the year 1778, became epidemical. Some caſes of them were very lingering and obſtinate§; and there were others even of a chronic nature‖. Bad Lumbago's and Diſorders in the Pelvis at this time were common, attended with ſlow Fevers and internal decay. The legs and thighs of many, in theſe caſes were ſpotted with red and black ſpots, ſhewing the great impurity of the blood, and the ſtrong tendency it had to diſſolution and corruption, and the diſpoſition the tenacious foul humours had to fall downwards, ſtagnate, and putrefy, as in a greater degree, is the

§ A middle aged Gentleman, of a delicate Conſtitution and thin habit, was attacked with pain and ſwellings in both ancles; and, upon the receſſion of the morbid matter, without any diſcharge, it fell upon one knee; which, with the muſcles of the leg and thigh became affected with ſoreneſs, numbneſs, a contraction of thoſe in the ham, and diſcolouration of the ſkin even to blackneſs, ſo as to threaten a gangrene. And thus the Diſorder remained for ſome time, getting always worſe upon the return of cold weather. However as the Spring advanced, the matter was abſorbed, receded and went off; but not without an attack of one Convolutionum malignarum, mentioned by Hippocrates in Statu Peſtilenti; from which he was relieved by the uſe of Calomel. And through waiting properly on his Diſorder from the firſt, and uſing no precipitate nor confining methods, which the violent and obſtinate ſtate of ſome caſes now would but ill bear, he recovered alſo the perfect uſe of his knee: an event more favourable than the termination of the acute caſe of the young Gentlewoman of good habit and in the flower of life, who by the injudicious uſe of Bark loſt the uſe of one elbow, though ſhe eſcaped with life, as mentioned in our account of the Peſtilential State of 1778.

In a young man of a tolerably good habit, after being affected with a ſlow rheumatic Fever, with much pain in the back and hips, the Diſorder fell into the thighs and legs. He was cured by aperients, taken in ſmall doſes daily.

‖ An obſtinate rheumatic Diſorder of the chronic kind, in a young Woman, ended in a deſcent and congeſtion of the foul humours in the joint of one knee, which deſtroyed the uſe of it.

caſe

caſe in the Plague itſelf†. Now all theſe Diſorders, not only acute but chronical, were attended with an oppreſſed, and at the ſame time languid pulſe, and the remarkable heavineſs of the eyes already taken notice of. And of a ſtrongly peſtilential nature was alſo that Diſorder, which about this time or not long after, attacked ſome of the Soldiers in Camp on Warley Common in the head; and which was attended with ſuch torturing pain for great length of time, and of ſo obſtinate a nature, that, though many withſtood its violence long, in the end ſeveral of them died*. Some, from the oppreſſion brought on by the tenacious humours upon the bowels, became ſubject to a Bubonocele, without any ſtraining, extraordinary motion, or accident‡.

With the burning Fevers, with Rheumatiſm, bad ardent ones without it, akin to thoſe deſcribed by Hippocrates *in ſtatu peſtilenti*, were alſo epidemical: and there were many fatal caſes of them§, and others very lingering and obſtinate. And though they had not returns of them, and much leſs upon the acceſſions in ſuch bad Fevers as came on upon equal days, as in thoſe deſcribed by Hippocrates, yet upon the firſt attack of the Fever in ſome, *erat oblivio, membrorum exolutio, et vocis defectio*, mentioned by him as ſymptoms attending the coming on of the uncommon Fevers that aroſe

† See Thucydides's deſcription of the Plague of Athens, and alſo Lucretius.

* This was the caſe alſo with a young Woman in London, who was ſaid to have the Rheumatiſm in the head.

‡ There were many bad caſes of Midwifery about this time, attended with floodings, great dejection of ſpirits, an uncommon languor and even gaſping for breath, if the doors of the houſe were ſhut, and there was not a free flux of air. There were likewiſe many inſtances of abortion.—A Gentlewoman at her full reckoning was now for the third time delivered of a dead child.

§ A young Man of an impure and weak habit, ſubject to bleedings at the noſe, which had lately went off, with an increaſe of appetite, which he uſed to want, was attacked on the coming on of one of theſe Fevers, with convulſions, which returned in a ſlighter manner next day; on the fourth often fatal in theſe caſes, a rattling in the throat and a coma came on; his pulſe being at times very weak and fluttering. And though he ſeemed better next day, from the methods uſed in this caſe, he died on the ſixth.

in *Statu Peſtilenti*. They had alſo coldneſs in the hands, and other ſigns of a great defect in the due circulation of the blood, and even a tendency to its ſtagnation with a pale and cadaverous aſpect. And it was ſome time before they grew warm again, and recovered the uſe of underſtanding and ſpeech. When they complained of heavineſs and oppreſſion in the head, were ſtupid and ſleepy, dull and languid to an extreme, without thirſt or appetite, and had an uncommon dejection of ſpirits†.

There was a kind of Influenza this Spring, as in the latter end of the year 1779, and many perſons had coughs, and ſome the Peripneumony already deſcribed*. Children alſo had ſore throats, and ſome perſons the ſcarlet Fever‖, the meaſles alſo were epidemical.

Beſides theſe Diſorders the Dyſentery likewiſe began to make its appearance again§; and towards the end of this ſeaſon, and the beginning of Summer, ſeveral were attacked with inflammations of the bowels; ſome of which were

† Two young Women in particular were thus affected, they however both recovered; the diſorder in her who had it in the worſt manner, going off with a ſmall degree of ſubſidence in the urine.

* An old Man had this Diſorder, joined with a Pleuriſy. It continued ſome time, but at length went off by expectoration, and ſecretions by urine; which before it ſettled was of a blackiſh yellow colour. The peſtilential State of the atmoſphere alſo greatly affected Brutes, eſpecially Horſes, with bad Colds and Fevers, of which ſeveral died.

‖ A young Woman had the ſcarlet Fever, with an external foreneſs of throat only. And a Perſon who had an Eryſipelas laſt year, had alſo the ſcarlet Fever, without any ſore throat, though above 50 years of age.

§ A Man in the Dyſentery was relieved by a ſingle doſe of half a grain of Ipecacuanha, with lying in bed, after uſing medicine for ſeveral days, without any good effect, while he ſat up in the cold.

Another caſe attendant on a puerperary Fever, that began like a common flux of the bowels, ſoon after delivery, and turned to this complaint about the ſixth day, and was then attended with ſo irritable a ſtate of the bowels, that not the ſmalleſt doſe of Ipecacuanha could be borne, was relieved by Saline Mixture, taken in the act of effervescence with two drops of Thebaic Tincture in each doſe. See our Obſervations on the treatment of this Diſorder in 1779.

complicated

complicated with a deſcent of them into the groin‖, as I have already obſerved: and many others in Fevers, at this time, had obſtinate conſtipations of them§.

Now, and particularly in the Autumn, there were not only Eryſipelas's, but alſo many other uncommon and bad Diſorders of the ſkin, eſpecially in perſons of bad habits,

‖ A young Man about 20 years of age, in a caſe of Bubonocele that hung on ſome time, and in which the Inteſtine was in a ſtate of ſtrangulation, was ſo greatly afflicted as to ſuffer the iliac paſſion, and vomit up his Excrements; and though he ſurvived it, yet after this, the caſe was ſtill of ſo lingering and untoward a nature, and attended with ſo great a defect of due circulation and action in the parts affected, that though cold as well as warm applications had been uſed, the Inteſtines would not return till after the uſe of the cold Bath. And even after the Rupture was reduced, as the caſe depended originally on oppreſſion and a febrile indiſpoſition, he could not recover health, nor go out into the air without growing worſe, till a change in his conſtitution for the better gradually came on. I mention theſe circumſtances, and am more particular in my deſcription of them, becauſe caſes of this kind are, in general, looked upon as purely accidental.

Another perſon about the ſame time was attacked with an inflammation on a Rupture he before had, which made it incarcerated. He found relief neither from warm nor cold applications, nor indeed from any thing, till an Eryſipelas broke out on the Abdomen, and after receding inwards and coming out again, and remaining in this fluctuating ſtate for ſome time, came at length to ſuppuration. See Hippocrates on the ſuppuration of Eryſipelas's, and the benefits ariſing from it, as well as the evils from the want of it in Statu Peſtilenti.

Thus theſe two perſons recovered in the Spring. But in the end of Autumn a Man of a groſs habit, in the decline of life, ſoon died in a caſe of this ſort: a mortification, from the great tendency of the humours then to putrefaction in ſuch an oppreſſed conſtitution, coming on in 24 hours, though it was not attended with any uncommon degree of confinement. The Diſorder in fact came on at firſt from very little extraordinary exertion of the body. He had had a tendency to it, at times a little before, but was then relieved by the diſcharge of three or four ſtools: and had been ſubject to a Rupture about 15 years before, which was once in a ſtrangulated ſtate, but after it returned, had never been ſubject to the Diſorder from that time to this.

§ A young Woman could not have a Stool procured by any means, from the 12th of May, to the 20th; that interval being the time when theſe peculiar difficulties reſpecting the confined ſtate of the Bowels were moſt prevalent.

and

and bad eruptions on the face and other parts of the body†. And not only theſe complaints were common, but there were two inſtances of a kind of peſtilential boil that I knew of*.

This Spring that very peculiar, violent, irregular, dangerous, and obſtinate diſeaſe, the burning, or as the people in Kent properly enough called it, the Plague, Ague made its appearance, became very epidemical in the eaſtern part of the Kingdom, and raged in Leiceſterſhire, the lower part of Northamptonſhire, Bedfordſhire, and in the Fens throughout the year§. The Diſorder had no regular type, the fit ſometimes not returning till after three or four days, at others in ſix hours: there being no intermiſſion in either caſe, but the Fever perſiſting, in their beginnings, in the intervals, whether long or ſhort. Perſons affected vomited up large quantities of yellow and green bile; the liver and bowels in general, being ſo greatly oppreſſed, that they complained of great tightneſs acroſs the belly, and a ſeeming fulneſs of it. The Diſeaſe in general was very difficult of cure; and under the circumſtances abovementioned evidently required a moſt exact and nice treatment. When therefore Practitioners imprudently gave the Bark in the beginning of the Diſorder, before due evacuation had been made by the bowels, according to information from a per-

† Several young Women in a Family, that had been Inoculated ſome time before, were ſubject to theſe complaints: and one of them had ſuch an eruption on the face, as quite disfigured her. A young Gentleman alſo had the ſame diſorder in ſo bad a manner, that he was ſent to Cheltenham to drink the purging mineral water there, which cured him.

* One of theſe Tumors aroſe in the back of a middle-aged Gentleman, rather in the decline of life, and after being attended with intenſe inflammation and exceſſive pain, for ſome time, at length came to ſuppuration in the middle of ſummer. The other was in the ſide of the face, and came on in the beginning of the year; being at firſt as hard as a ſtone, and attended with ſuch pain, that the affected perſon could get little or no ſleep on nights till May, when it was opened; but he remained in a very weak and languiſhing ſtate for ſome time after.

§ This Diſorder is one in the Catalogue of thoſe dreadful Diſorders wherewith the Almighty threatened to afflict the Jews for Diſobedience. Leviticus xxvi. 16.

ſon

ſon of credit, they loſt ſix or eight Patients in a week, notwithſtanding that medicine ran off by the bowels, as it generally did in all caſes. And it happened not a little unfortunately, that this circumſtance led many as injudiciouſly to give extract of Logwood, and other aſtringents, in order to reſtrain the diſcharge, which increaſed the miſchief. Thoſe who were treated in this manner, who did not die, recovered not health, but were ſubject to continual relapſes. Some however were managed in a more judicious manner, namely by giving, after the uſe of an Emetic, gentle aperients, to which was added a little caſtor oil mixed with yolk of egg, to open the bowels; after the due uſe of which the Bark ſucceeded very well, and the Patients recovered. This ſtrongly peſtilential Diſeaſe however had ſuch an effect upon them, that the complexion of their faces, for a time, continued as white as paper, and they went abroad more like walking corpſes than living ſubjects. And during the Diſorder they had the peculiar heavineſs of the eyes already noticed‖. For though an intermittent Fever, it had nearly the ſame ſymptoms attendant on it, and was like in nature, being a burning one, to the continual ones now reigning, in all other reſpects‡. This Spring was very fatal to old perſons, many of whom died of various Diſorders.

In the middle of Summer, and particularly in the very hot weather in the beginning of Auguſt, violent Diarrhæas with teneſmus came on, moſtly in burning Fevers*; and the latter raged now, at the end of this ſeaſon, and in Au-

‖ *Vide Hippocratem de Febribus intermittentibus incertis, vagis, implacidis, et inconſtantibus, in Statu Peſtilenti.*

‡ This dreadful Diſeaſe, in the courſe of the year, raged with ſuch violence that five perſons were buried in an evening in ſome large Towns in Northamptonſhire. And about Boſton in Lincolnſhire it was ſo general, and grievous, that out of forty Labourers hired for work in Harveſt, half of them, it was ſaid, would be laid up in three days. And all ſtrangers were affected with it who were not uſed to the air of the country.

* A young Woman in 6 or 7 Hours was ſo reduced in one of theſe caſes, attended with ſickneſs and violent reachings to vomit, that ſhe was ready to faint away every minute, and obliged to be ſupported with Port Wine. She recovered, but many others died of theſe Fevers.

tumn,

tumn, in the towns of Birmingham and Nottingham, and vaſt numbers, eſpecially among the poor, died§.

Moſt of the Diſorders mentioned, continued, and grew worſe in Autumn. There were rheumatiſms attended with blackneſs on the ſkin; bad inflammations of the tonſils, uvula, and throat; eſpecially in large towns and among children. Some of theſe ſore throats ended fatally, being attended with ulcerations, and mortifications, very offenſive before death. Others degenerated into a kind of chronical Diſorder, leaving a tumor on the tonſils. There were alſo many fatal caſes of Fevers, and many abortions cauſed by, and attended with them. For burning Fevers, accompanied with vomitings and purgings, and great foreneſs all over the body, were now prevalent in London, and indeed through the whole kingdom; vaſt numbers being afflicted with them. But it was much worſe in general with thoſe, who, inſtead of a Diarrhæa, had an obſtinate conſtipation of the bowels†.

A bad kind of Small Pox and the Chincough attended this very extraordinary peſtilential State; and vaſt numbers died of the former in large towns during the Summer, but more in the Autumn and beginning of Winter; and many of the latter‡.

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§ Sixty Perſons were ſaid to be buried in a week. Thus much however is certain that the fatality in the latter Town about this time was ſo great that a report was ſpread in the country, that the Plague was broke out in it.

† One peculiar Caſe was complicated with a paralytic ſtroke on the attack, and according to the nature of a true peſtilential burning Fever, was attended with great internal heat, and alſo thirſt, though the man was cold to the touch externally. He had alſo great coſtiveneſs of the bowels, and difficulty of their being moved; and was heavy and ſtupid at firſt, then delirious for two days, and then dull and comatoſe. See Hippocrates concerning theſe Diſorders in *Statu Peſtilenti*. There was alſo a fatal puerperary Fever that came on from repelling the milk.

‡ There was ſaid to be a great mortality this year in the French Fleet again, and alſo in one belonging to the Spaniards. And the Air was ſo Peſtilential in the Eaſt, that the Plague continued at Smyrna, Adrianople, and other places, all the Winter, and broke out in Conſtantinople as early as the

The Apoplexy was a Diſorder common to this year‖, and there were ſome caſes of Hydrocephalus. But inſtances of lunacy, in particular, became now very frequent; eſpecially in Perſons hereditarily diſpoſed to it. Gouty people alſo were much ſubject to their Diſorder; and to frequent returns of it. Cancerous complaints likewiſe became very common, and Dropſies and Conſumptions, as I have already mentioned. Perſons in Declines and other chronic Diſeaſes, beginning now to have a very pallid look; the former Diſorder, though often lingering, being ſometimes, in other caſes, attended with a ſudden decay of ſtrength in the very rapid progreſs of it.

Thus this peſtilential conſtitution, preceeded many years by preparatory large quantities of rain and vapours, inducing an Atmoſphere productive of putrid Diſorders, and forwarded, brought on, and continued, by alternate returns of intemperate heat and cold, was at length raiſed to this high pitch of violence by predominant moiſture, and the union of great heat and cold with foul exhalations; frequent and ſudden tranſitions from the one to the other, and the confuſed mixture and united power of them all. Their bad influence and force on the body being ſtill farther increaſed by tempeſtuous winds, and the ill effects of a ſubſequent contrary extreme, that of a ſtagnant and cloſe Air, and obſcure ſky; and by ſeaſons thrown out of due order, and a perverſion of natural order by irregular ſtates and extremes of weather in the ſeveral parts of the year.

the middle of February. In the courſe of the year, half the inhabitants being carried off by it at Alexandria, and Cairo: in which latter city, a thouſand were ſaid, by accounts in the Papers, to die daily, and 40,000 in the whole at Salonica.

‖ A *young* Man died of it in the Spring.

# CHAPTER V.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1782.

THE Peſtilential Conſtitution and its Diſeaſes being now ſet in, while the former remains nearly in the ſame ſtate, and the latter continue in a great meaſure, in the ſame form, it will not be neceſſary to give ſuch minute deſcriptions of either. However, as the proceſſion and increaſe of them have been gradual, and they have arrived at their preſent ſtate and power by degrees, ſome further changes happened in them, and force been added to them, it will ſtill be neceſſary to take ſome notice of both.

This year was a kind of mixture of the two preceeding ones; there being a ſeverity of cold in it equal to that in 1780, but it being, on the whole, moſt remarkable for the continuance of the cold rawneſs, tempeſtuous winds and rains, and during the Summer at times, the cloſe heat alſo of the preceeding year. The wet weather, in fact, was ſo continual in the latter end of laſt year and the beginning of this, that there was hardly 24 hours dry weather together from the latter end of October to the end of March; this year again, as the laſt, being preceeded by an obſcure, cloudy exceſſively wet and foul Autumn and Winter. The atmoſphere, in the latter end of the laſt mentioned ſeaſon and beginning of Spring, being loaded with impure vapours, the Air ſubject to the ſudden changes, and its temperature abounding with the variable and mixed weather alike common now to all parts of the year, and confounding and deſtroying

deſtroying that peculiar to each month*. There were not only tempeſtuous winds with large quantities of cold rain, and a much rawer Air than uſual out of the weſtern points, and the ſouth†, accompanied with greater impurity, a more gloomy obſcurity, and increaſed dampneſs in it, but alſo hailſtorms, and high winds with vaſt falls of ſnow‡ out of the north, the eaſtern, and other quarters; and ſo augmented a power of cold, from the chillneſs coming on in the Air after ſuch vaſt quantities of rain, and the long hanging on of ſuch inclement and ſevere weather carrying on into and continuing Winter in Spring§, as brought on an univerſal peſtilential Influenza, or peculiar ſickneſs with defluxions, and Fevers attended with coughs and diſorders of the lungs, through all Europe; called in Denmark, Sweden and Ruſſia, where it was moſt grievous, the Northern Malady.

The tempeſtuous weſterly and ſouthern winds continued, and immenſe rains alſo fell, or rather poured down, during the heats of Summer, as in laſt year. And though this ſeaſon was not of ſo long continuance in this, yet a great part of it was very hot and ſultry, though this cloſe weather

* This has been the caſe with the weather of March, in particular, for three preceeding years; nor was it a natural March month in this. For though the Air was ſo cold, it was, for the moſt part, foul and raw, and wanted the purity natural to it in the Spring, and the wholeſome ſtate it was in, in that ſeaſon, many years ago.

† The South wind was ſo cold and raw this year, as to deſtroy whole walls of Fruit Trees, planted on that aſpect. Which, with the terrible effects of a Peſtilential State alſo on human bodies, puts me in mind of Virgil's fine deſcription of one in the following words

*Subitó cum tabida membris*
*Corrupto cæli tractu, miſerandaque venit*
*Arboribus ſatiſque lues, et lethifer annus.*

‡ There were very ſevere froſts at Vienna, by accounts from thence in the beginning of May, and ſuch falls of ſnow about that time in Italy, as made the roads impaſſable.

§ And yet notwithſtanding all this ſevere weather, there was thunder in the very beginning of April, and very cloſe weather in May.

was interrupted, at times, by ſome very cold‖, raw, and gloomy.

In the very beginning of Autumn the cold weather ſoon gained greater power, and a very great foulneſs in the Atmoſphere prevailed, with an obſcure and cloudy ſky; the wind turning about into, and exceſſive rains often falling in much larger quantities than even in laſt year, out of every quarter. And though the Air and Sky were ſomewhat clearer, and the weather warmer about the middle of it, yet this was ſoon followed by the uſual raw, foul and gloomy kind of it, with falls of ſnow and rain: after which drier and ſeverely cold weather† prevailed to the end of this ſeaſon. The uſual foulneſs of the Atmoſphere and gloomineſs however continued, as well then as at other times, and alſo in the beginning of Winter, with a more ſtagnant Air. High winds coming on again before the middle of it, with rain, hailſtorms, great falls of ſnow, and a froſty Air, followed by warmer weather and thunderſtorms even at this ſeaſon of the year; and theſe again by foul, obſcure, tempeſtuous and rainy weather, and then colder with ſnow.

Thus we ſee that this year like the laſt conſiſted of intemperate cold, moiſture, and heat, with a predominance of the two former rather than of the latter, as in that. And that the ſame peſtilential power at leaſt continued in the Air or rather that a greater reigned, we had abundant proof in the appearance of burning Fevers attended with the peculiar heavineſs in the eyes already deſcribed, and alſo both with eruptions on the ſkin, and without, in the very beginning of the year. Perſons without them being affected with

‖ Such terrible hailſtorms fell this Summer not only in France but Spain, as deſtroyed the fruits of the Earth, and deſolated that part of the Country where this happened.

† About this time there were ſuch uncommon froſts, near Pons in France, towards the end of, and even during ſhowers, as froze Ice an inch thick round the branches of trees, and Iſicles of ſuch an enormous ſize all over them, as broke them down. There were ſuch kinds of froſts, but not to ſuch a degree, with and immediately after rain in England, in the latter end of 1779, or beginning of 1780.

great

great coldneſs, a very languid circulation, and even tendency to ſtagnation on their attack*. They were often attended with Diarrhæas, and ſometimes with coughs and Diſorders of the breaſt; and thoſe with rheumatiſms alſo became epidemical. They being all accompanied with extreme languor, uncommon and vaſt irritability, great internal heat, and likewiſe great thirſt, in the febrile returns or paroxyſms that came on, regularly every evening; as was the caſe with continual Fevers in general, howſoever attended, in various caſes, with different complaints or ſymptoms, the radical Diſeaſe, the burning remittent Fever being of the ſame ſpecific nature in all. The Dyſentery alſo was common, at this time, in many parts of England: and there were bad caſes of the Small Pox attended with high putreſcence§.

In the cold weather in the Spring burning Fevers with affection of the lungs became epidemical, and ſeveral children died of them†. They were now alſo often attended with inflammations of the bowels in their beginnings, and alſo in the Summer, when theſe Diſorders were very obſtinate and dangerous. Agues likewiſe of a very irregular and bad kind†, and ſometimes attended, as well as continual

* A young Woman on the attack of one of theſe Fevers, could hardly get warm again; and when ſhe did, a ſwelling in one arm appeared, ſo tenacious and unattenuable were the foul humours.

§ A fatal caſe of this kind happened in a young Man, even in the Diſorder by Inoculation.

† Amongſt the reſt one lately inoculated; and another who had had the ſmall Pox in the ſame way, was attacked with a fever and dry cough, with a remarkable heavineſs at firſt and diſpoſition to ſleep, ſymptoms which the child that died alſo had, but afterwards it grew delirious.

In a puerperary caſe, wherein the breaſts were not drawn, and the lochia were rather deficient, the Woman was attacked with a fever, cough, and alſo a tumor in one breaſt. However through the free diſcharge of it when it broke, expectoration by the cough and the additional help of a Diarrhæa that came on, though greatly reduced, ſhe recovered.

† The Bark given to a Gentlewoman, after the ſecond fit of a tertian ague, ran off. Upon the imprudent uſe however of other aſtringents, in order to prevent this, an inflammation of the bowels came on, and ſhe died about

nual Fevers‖, with ſo great faintneſs as to bring on a perfect Lypothymia on their attack, were very numerous.

But among all the Diſorders incident to, or that roſe, at this time, under this very general, extenſive, and violent Intemperature, the Influenza§, as it was called, an highly peſtilential Diſeaſe of a very peculiar kind, that ſpread itſelf, on a ſudden and in a moſt rapid manner, through all Europe, was the moſt extraordinary. About the latter end of Spring it was ſo general in England that 3000 perſons were ſaid to be taken ill of it, in and about London, in one day. And it raged ſo at Vienna and other places, that, by accounts in the public Papers, 80,000 were affected with

the ſeventh day, from the attack of the intermittent The Bark alſo given in another intermittent tertian, a week after the Diſorder came on, would not anſwer, though vomits had been repeated, and there had been conſiderable ſweats after the paroxyſms: which plainly aroſe from the too early exhibition of that medicine, the Diſorder being not yet come to any due criſis.

‖ Fevers were ſaid to be ſo bad this year in Worceſter and London, that five Relations, after viſiting one another when ſick, died of them in the latter city. And by accounts of the brain being greatly affected in many caſes, I am inclined to think *Phrenitis* itſelf came on in them this very year. If under a notion of their being putrid fevers, wine is given, at leaſt in quantity, and in the beginning of the Diſorder, it will often, by ſuddenly rarefying the blood and foul humours, and heating the body, greatly aggravate the ſymptoms, and increaſe its effects upon the head. For though it follows in general, the type of the former putrid fever, in regard of remiſſion in the day time, it is not a putrid fever properly ſo called, but a burning one peculiar to this climate. In which the tenacious foul matter, as in all Peſtilences, is ſo far from being capable of ſudden ſeparation from the body, that it is not often, at firſt, of mere ſimple protruſion to the ſurface of it. And hence the obſtinate and frequently lingering nature of peſtilential Diſorders in ſome, and ſometimes violent and ſuddenly fatal one in other caſes, when the morbid matter abounds; and alſo the frequent dropſical tendency of the ſcarlet fever and ſore throat, and other peſtilential fevers, when their firſt efforts are over.—See my obſervations on them on their riſe in 1778.

§ About the time of the riſe of the peſtilential Influenza in England, after a great ſtorm in London, attended with violent lightening, and ſo loud a clap of thunder as greatly terrified the Inhabitants, there appeared a luminous meteor in the Weſt, in the form of a ſpear, which continued viſible for near five minutes; and diſappearing, the ſky became illuminated with vaſt numbers of rays projecting from a point, and ſpreading like a fan; a ſtrong emblem of the power and univerſality of that violent, peſtilential Diſorder.

On this account the Court of the Exchequer, and all places of public reſort were ſhut up.

it,

it, in that city and its environs, at the ſame time; and nine out of ten in the city of Lichfield and other towns, the increaſe of cold and moiſture in the atmoſphere, this year, and dampneſs on the earth, were ſo great. People attacked with it were ſuddenly affected with great defluxions on the noſe, throat, and lungs, bringing on violent ſneezings, ſoreneſs of the throat, coughs, difficulty of breathing, oppreſſion and inflammations of the lungs, with their concomitant ſymptoms and conſequences; the Diſorder, but eſpecially in caſes that were in any degree violent, being attended, during its courſe, with a peſtilential Fever, of which many were relieved by perſpiration. It is remarkable however that they ſooneſt got well who kept upon their legs: thoſe who took to, or were confined to their beds, ſoon growing very weak‖, and being ſometimes ſubject to a ſpitting of blood. Some had ſwelled faces and violent pains in the teeth; ſome foul eruptions on the lips; and others terrible ulcerations in the mouth‖. Some had loſs of appetite and ſickneſs at the ſtomach; and others giddineſs, violent head-achs accompanied with a ſlow Fever, and even loſs of memory‖; the Diſorder being attended with exceſſive faintneſs, though a perſon was ill of it but a ſingle day‖. By its running through whole families it appeared alſo to be communicable by infection. Its general cauſes however certainly were an exceſſive coldneſs, and moiſture in the atmoſphere, joined with an ill ſtate brought on therein by the power of heat, through the return, at times, of an hot Intemperature.

This Diſorder was not in general attended with ſo great preſent fatality, at leaſt not in many places, as from its highly peſtilential nature might have been expected. Though it ſometimes hung on, grew worſe, brought on other complaints, and appeared in various ſhapes on the return of cold weather in the decline of the year; and thus laid the foundation of, and brought on many conſumptions, and other chronic Diſeaſes that in the end were

‖ See Thucydides's Deſcription of the plague of Athens, and Hippocrates de morb. vulg. in Statu Peſtilenti.

mortal§. And very fatal likewiſe, in ſome places and in ſome peculiar inſtances, were ſome more recent caſes, both of this Diſeaſe, and the burning Fever epidemic at the ſame time*. In a Diſorder of only two or three days continuance, perſons affected with it grew remarkably pale and wan, with a fallen countenance, full glazed look of the eyes; and ſoon became greatly emaciated; their appearance being much the ſame as that of thoſe who had the peſtilential ague in the preceeding year, and they walking about, as after that, more like ghoſts than living ſubjects.

As to the medical treatment of this uncommon Diſeaſe I can ſay but little; it being ſo mild, and going off, in general, ſo eaſily with us, that there was very little opportunity for practice in it. Some, under a notion of inflammation in the lungs, adviſed bleeding in it: but it ſeems to have been a method that, except in a few extraordinary caſes, if we may judge from the highly peſtilential nature of the complaint, and the extraordinary weakneſs attendant on it, could be in general but of little uſe, at leaſt not proper to be much inſiſted on. It being in general beſt to keep on the legs in moſt caſes, as I have already obſerved, and let the Diſorder, in a good meaſure, take its courſe, never in-

§ A Man about 50 who had had the Influenza in the ſpring, and after it the ague, was affected with a cough and ſlow fever all the Summer, and almoſt to the end of Autumn, when he had a paralytic ſtroke on one ſide, after which the cough again returned. And notwithſtanding the morbid matter ſoon after alſo fell upon his bowels and kidneys, producing frequent motions and efforts for its diſcharge, no due ſecretion of it came on by them. Calomel indeed opened his Bowels, and relieved him from the obſtructions there: but after a repetition of it, it brought on great irritation and teneſmus. After this he had an effort by the cough again: and then pimples broke out on the body, and black ſpots appeared on his legs, as if they were going to gangrene. Falſly attributed to his having taken large quantities of volatile Salt for his cough, but really owing to the bad ſtate of his blood. The caſe proved fatal.

* Eight Perſons were reported to be dead in one Family, and four or five in another. Many alſo died at Birmingham and Northampton of theſe and other Diſorders. And there was ſo great mortality in Kent, that a whole Family both root and branch was cut off: a Mr. A. Hunter, his wife, ſon, and three others. There were alſo accounts of a great mortality at Peterſburgh.

terfering

terfering but when it was abſolutely neceſſary.—The chincough accompanied this peſtilential Diſeaſe.

In the middle of Summer burning Fevers were very fatal§. They were attended with violent pain in the head, great internal heat, and dejection of ſpirits. In the latter end of it, and in Autumn, thoſe without, and ſome alſo attended with inflammation of the bowels, and Eryſipelas's, Diſorders common to the whole year, were accompanied with ſtill greater weakneſs and lowneſs. And beſide caſes ſuddenly fatal, there were many violent, as well as ſlow Fevers, that were very obſtinate and of long continuance, attended with ſcabs and eruptions on the ſkin‡; eſpecially in the progreſs and decline of the Diſorder, when nature began to be relieved, and the morbid matter ſo far attenuated, as to be thus capable of being thrown out upon the ſurface of the body. Painful boils alſo aroſe in ſome lingering caſes‖, and abſceſſes were formed*. The peſtilential

§ By accounts in the Papers there was, about this time, in the Biſhopric of Thouloufe in France, ſo violent a Fever, attended with profuſe ſweatings, and a gathering in the head, as killed in 24 hours.

‡ In a violent burning Fever in a Man of an highly ſcorbutic habit, about 50 years old, by reaſon of the great increaſe of ſymptoms, and in particular on account of a tenſion in the abdomen, and fulneſs in the ſtomach and bowels, a vomit was given on the 9th day; which, though its operation was difficultly borne, afforded relief to the latter. After this however, notwithſtanding the uſe of aperients, ſo uſeful in theſe fevers, in the intervals of the paroxyſms, and of antimonials and ſaline medicines at night in them, with the repetition of the vomit after two days, the Patient complained of ſoreneſs in his throat; a ſymptom often attendant on theſe burning Fevers, and that, according to the preſent very inflammatory nature of it, came in with the ſcarlet fever in 1778. He had great heat flying about him from place to place, and ſeemed inclined to be delirious; but one of the antimonial Powders, happening to vomit him again, he was much relieved. The caſe however proved very obſtinate, and went off without any good criſis: all the relief he had afterwards ariſing from a kind of leprous eruption that came out on the ſkin. He was affected with the rheumatiſm in the beginning of the next year.

‖ One of theſe ſlow fevers was accompanied with very painful boils in the head and face, and at times a very violent head ach.

* In a man who had a bad inflammation of the Bowels, an abſceſs at length was formed in the groin.

A fever alſo of long continuance was relieved at laſt by an Impoſtumation.

humours alſo fell, without febrile efforts, upon the eyelids and eyes of ſome, and others had eruptions on the body.

Before the coming on of Winter ſeveral aged, infirm, and intemperate perſons, ſuch as did not uſe proper exerciſe, had ſtrokes of the Palſy†. And many labouring under hereditary impurity of the blood, and infirmity of conſtitution, were now wearing away by lingering, or taken off by violent Diſorders; and many old people in particular died.

In the cold, raw, foul weather in the latter end of Autumn and beginning of Winter, the Influenza, or coughs and Diſorders of the lungs with Fever, returned again. And more violent burning Fevers running through whole Families, and apparently infectious, attended with coughs and Diarrhæas, or a conſtipation in the bowels, as in the Summer but of a worſe kind, were prevalent§; many dying of them in cloſe large towns.

In

† A Man who had the Gout frequently, without its going well off, and who had been ſeveral times at Bath without much good effect, having not been directed to the uſe of the Water at Cheltenham as a preparative for the former in his highly ſcorbutic caſe, was now attacked with that Diſorder in his head; ſo much had the gouty matter accumulated in his Body, and ſo greatly was he oppreſſed with it.

§ A Gentlewoman who had an Eryſipelas in the Summer, and after that a Cough with expectoration, was now attacked with an inflammation of the Bowels; the remains of the tenacious heated peſtilential matter having fallen on them. A doſe of Calomel however opened the obſtructions in them, and relieved her for this time. She had however in the courſe of her Illneſs, four different returns of it; the laſt of which was of ſo fixed a nature that it brought on the iliac paſſion. However a large doſe of the above-mentioned medicine, after taking 20 drops of Thebaic Tincture by way of preparative ſome hours before, relieved her again under this exigency. The Fever however original

In the middle of Winter acute Dyſenteries were epidemical again through the Kingdom, and among chronic Diſorders conſumptions; ſome thouſands dying of them in London only, by the bills of mortality. So numerous, dreadful, violent, obſtinate, and fatal were the Diſeaſes and grievous maladies, both acute and chronical, brought on by and accompanying this ſurprizing intemperature; which has recurred in more or leſs degree, every Spring and Autumn, and been productive of Fevers with Coughs and complaints in the Cheſt, eſpecially among Children, and brought on or confirmed many conſumptions in young perſons ever ſince.

## CHAPTER VI.

### *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1783.

THIS year, truly as well as emphatically called, by an ingenious and accurate Writer‡, an year full of horrible Phœnomena, was preceeded by a Winter in which, with the now uſual very variable and often tempeſtuous winds,

ginal in the caſe, after this grew violent, and a delirium came on, a common attendant in all bad caſes, the Diſorder being at a ſtand for ſome days. However upon a Ptyaliſm's coming on ſhe grew rather better; but even by this the tenacious matter was not duly diſcharged, for after it was over, the inflammation of the Bowels again returned. And thus ſhe gradually ſunk under theſe repeated relapſes.—What can ſhew the inſeparable nature of ſome tenacious matter in a clearer light than this moſt remarkable caſe.

‡ Mr. White of Selbourne.

raw, foul, gloomy, rainy, cloſe, and complicated weather, there was about the middle and end of it ſome very cold with falls of ſnow. And though this did not lye long on the ground, but after a few days diſſolved, yet there was great coldneſs at theſe times, and an Air more like that of January formerly than any of late years. And, in the following ſeaſon, an Air alſo more like the uſual Air of March, though foul withal and hazy, and, at times interterrupted by the warm and cloſe, and even hot and ſultry, pervaded the whole Spring. The drought that attended it continuing, for the moſt part almoſt to the middle of Summer; there being ſome indeed, but not much rain, before.—To this coldneſs in the Spring ſucceeded heat in Summer ſo exceſſive, as to equal, and in ſultry cloſeneſs even ſurpaſs, that in 1779; raiſe Farenheit's Thermometer, here in the center of the Kingdom, hung facing the north, up to 83, and in the city of London, to 90 degrees; and ſo affect its Inhabitants, that they were ready to drop as they walked in the ſtreets, and hardly able to lye in their beds in the night.—This extraordinary heat was accompanied with ſuch a foul ſtate of the atmoſphere, through vaſt quantities of groſs exhalations raiſed into the Air, from the exceſſive moiſture of the two preceeding years, and their being there heated and the finer parts evaporated, that the hazy vapours ſo obſcured the face of the ſun, firſt towards evening, and then in the afternoon, and even at mid-day, for eight days together before the middle of Summer, and

† The heat was ſo exceſſive as to produce, in the end of Summer, in the evening of a very hot day, a remarkable collection of embodied light united with ſulphureous vapour, commonly called a meteor, or rather ſeveral that followed one another in a train, that moved in a direction nearly from North-Weſt to South-Eaſt, and were attended with a great exploſion when they diſappeared.—Indeed ſigns of great heat in the atmoſphere had not been wanting, even early in the year; a meteor in the form of a luminous arch, appearing extended acroſs the hemiſphere, from North-Eaſt to South-Weſt; the Aurora borealis riſing up from the horizon on all ſides till the rays of light met vertically in a centre, as in 1778, at the ſame time, and a fiery colour mixed with a diſmal darkneſs appearing at various others.

alſo

alſo at times afterwards, that it looked of a ſort of bloody, or rather brown, dim, fiery colour; the moon having nearly the ſame appearance at night. And the ſame ſort of fogs prevailed at the ſame time, not only through England but over all Europe.

This foulneſs in the atmoſphere was followed, about the middle of Summer, by tempeſtuous hurricanes, and dreadful ſtorms of rain and hail, attended with lightning and thunder ſo uncommon and violent, as had not been known in the memory of man. More rain likewiſe falling afterwards, and alſo towards the end of this ſeaſon, and beginning of Autumn, accompanied by tempeſtuous weſterly winds, and ſucceeded by very foul weather till about the middle of it; when there was ſome that was cooler and finer. Followed however by more rain, thick fogs, cold, raw, tempeſtuous weather, with falls of ſnow; and then a mixture of the warm and cold at times, attended with the uſual foul, moiſt, and foggy Atmoſphere, and obſcure ſky.—As for the Winter it was as foggy and gloomy as the Summer had been foul, with a ſeverity of weather proportionable to the heat in that†. But though it was very cold all through the middle of it, yet there was no continued froſt without relaxing and going off at times, nor any of the clear Air natural to this ſeaſon, except a day or two now and then, and once ſeven days together about the middle of it; but a foul atmoſphere and hoary froſts, and tempeſtuous winds with falls of ſnow and ſome rain.—Thus we ſee that cold and dryneſs

† On December the 30th. the Severn was froze over in one night, and the Tyne at Newcaſtle. The Thermometer at the latter, according to Mr. White, being 2½ above null, in 1780, 3 below it. At Edinburgh one Thermometer was ſaid to be 4 degrees above Zero on the 28th, on the 29th 7 degrees higher, and on the 30th, 4 below Zero; varying thus 15 degrees in a few hours. The 24th of February alſo it was ſo cold, with an hoar froſt, that the Thermometer, in the South of England, was 8 degrees below the freezing point, which is within one degree as low as it was with them this froſt; ſinking in the Morning to 16 in the open air.

predo-

predominated in the Spring; exceſſive hot weather with a peculiar foul and hazy Air in the Summer; and in the Winter ſevere froſts and fogs; Autumn having nothing peculiar, except a little fine weather about the middle of it, though great impurity, in general, reigned through the whole.

This dreadful year, in the very beginning of it, raiſed burning Fevers, in ſome young, ſtrong perſons, to ſuch an height, as to bring in τὴν Φρενῖτιδα, the phrenzy§, in this interior part of England, and make it ſometimes an attendant on them, according to that of Hippocrates de

§ In the cold, raw weather, about the middle of Winter, when the firſt ſnow fell, a ſtrong labouring man about 30 years old, and in the flower of life, was ſeized with ſo great a coldneſs, on the coming on of a burning Fever, and ſo great a tendency to ſtagnation, that a Paralyſis affected one arm and leg; nor did he get warm again during 24 hours. With theſe extraordinary ſymptoms, he had the uſual ones of ſickneſs at the ſtomach, and pains in the head and back; for which he took a vomit, and a bliſter was applied between the ſhoulders. When his Fever came on the next Morning, his pulſe grew ſo full that ſome blood was drawn. But notwithſtanding this, the Diſorder ſoon roſe ſo high, that he was attacked with a phrenzy. The caſe verifying thus the obſervations of Hippocrates concerning the powerful effects of cold in bringing on and increaſing Winter Fevers, and producing phrenſies. Sect. v. in Libr. de Affection. However by repeating vomits and cooling aperients, in the early ſtages of the Diſeaſe, he with tolerable eaſe recovered. Though it ſo terribly ſhook the nervous ſyſtem, that it never after recovered its former ſtrength, and ſtability.—This was the firſt inſtance I had ſeen of a phrenſy, under the preſent peſtilential Conſtitution. But though there was the ſtrongeſt call for a bliſter in this caſe, wherein the blood and humours had ſo great a tendency to ſtagnation, it may be proper to take notice, that neither they, nor ſtimulating or heating methods of any kind, operate kindly in general, in the beginning of burning Fevers, and particularly bliſters on the head. For hereby ſuch a quantity of tenacious humours are on a ſudden rarefied, in bad caſes, as the Conſtitution cannot diſpoſe of, they being moſt of them as yet unfit for ſecretion.

Morb.

Morb. Vulg. in Statu Peſtilenti, Cœperunt itaque Febres ardentes et Phrenitides ante ver; while others of leſſer ſtrength or a more advanced age, were affected with Coma ſomnolentum‡. There were alſo inſtances of Tetanus and the locked Jaw in theſe Fevers‖. And in the latter end of this ſeaſon, and in Spring, burning fevers became more general, and were accompanied with uncommon ſymptoms, horrid terrors, and a conſiderable degree of fatality†. They were attended with large diſcharges of viſcid bile from the ſtomach. And from the increaſing quantity and tenacious ſtate of this phlegm, and other foul humours, determined to and oppreſſing the ſtomach and liver, and the other viſcera of the abdomen, Diarrhæas, and at other times, various degrees of obſtruction, tenſion, and inflam-

‡ Another Man aged 50, upon getting up very early in the morning, was attacked with a greater degree of coldneſs than what came on in the preceeding caſe, attended with blackneſs round the eyes, and tendency even to total ſtagnation. He had violent pain in the head, ſickneſs of the ſtomach, and inſtead of Phrenitis, Coma ſomnolentum.—Theſe caſes are in ſome meaſure of the kind mentioned by Hippocrates in Statu Peſtilenti. And though the ſymptoms, through age and infirmity, and a worſe ſtate of the blood, were different in the reſpects above mentioned, the fever and its cauſes, in all others, were undoubtedly the ſame in both.

‖ A Woman between 40 and 50 Years of Age, who had had a Fever, at times, for half a year, and lately a cough, when the latter abated, was attacked with the Fever again in a more violent manner, attended with Delirium; being then in a very reduced ſtate, her countenance pale, and face bloated. Under theſe difficult circumſtances, ſhe was ſeized with a locked Jaw, and univerſal Tetanus: complaints evidently ariſing from the long continuauce of the Diſorder, and the difficulty of parting with the morbid matter, theſe however happily ſoon went off.

† Several perſons of one Family died of theſe Fevers, in a Village near the place in which I live, and three in one in Shropſhire, the violence, obſtinacy, and fatality of them were ſo great; as, in regard of the two latter, was likewiſe the caſe with chronical Diſorders.

mation

mation in them, but eſpecially in the two former, often now came on in fevers§. Inflammations alſo producing a perfect

§ A young Woman, on the abatement of the inflammatory ſymptoms, in one of theſe caſes, after a ſecond bleeding, which, though it reduced her, brought on a ſmall flux of the menſes, that was followed by a violent putrid purging with a very offenſive ſmell, which however ſhe bore pretty well, upon the going off of the latter, was attacked with a pain in the ſide and oppreſſion of the heart, on the 7th or 8th day of the Diſorder. This however went off, and ſhe grew better, till on expoſing herſelf to cold, ſhe was ſeized with a ſecond chill fit; after which the Fever and Diarrhæa returned, for ſhe had as yet no ſigns of criſis, either by perſpiration or ſubſidence in her urine. She however grew better again; but, upon indulging her appetite too ſoon in eating heartily of chicken was taken with oppreſſion and pain in the ſtomach, attended with a ſtoppage of all diſcharge from the Bowels. And a total ſtagnation of the blood in her reduced ſtate ſoon coming on, ſhe died the night following. Hippocrates *in lib.* 1. *de Morb. Vulg.* gives us a remarkable caſe, ſetting forth the pernicious effects of the improper uſe of food in Fevers; which, for the honour of Phyſic I wiſh had been more attended to For if this and his wiſe obſervations concerning the impoſſibility of nouriſhing foul bodies had been, Practitioners had not perſiſted ſo long in their vain attempts to reſtore perſons in conſumptions, and after Fevers, and ſupport people in the latter, by viſcid diet. I have cured many of the former, but never one without laying a reſtraint on Patients, both in reſpect of the quality and quantity of their food, nor without the uſe of regular exerciſe, and a ſtrict regard to the ſtate of the digeſtive powers. Nay oppreſſing the conſtitution with food has been ſo far from being uſeful, that a quite contrary method, the unloading it by repeated vomits, has been found to be ſo. Even Aſcites of 3 years ſtanding, to cure which, a large quantity of medicines had been taken, and Porter drank with an intention to mend the blood, was at length radically cured, merely by ordering the diſuſe of the latter, and of all viſcid liquors whatever, and inſtituting in their place the uſe only of light ſpirituous ones, without a ſingle doſe of medicine of any kind, after the Patient had been tapped 3 times, though 40 years of age. Medical Gentlemen often do not ſeem to conſider, that the radical cauſe of all Diſeaſe, both hereditary and acquired

fect obſtruction of the inteſtines, and the diſcharges from them, were epidemical at this time. But, from the large diſcharge of bilious humours in the former, to call theſe burning fevers bilious ones, was certainly highly abſurd‡: as well might the plague itſelf, in which there are alſo often large diſcharges of foul bilious matter, be called a bilious

acquired ever lay, and ſtill lyes, in intemperance; and that a ſarrago of medicines, and a load of viſcid diet, in oppreſſed and weakened bodies, are not likely to be inſtrumental in their cure.

‡ A Gentleman of a middle age, in the beginning of a burning Fever, was affected in the bowels, and diſcharged a great load of foul humours by a putrid purging. He took 3 vomits at proper intervals, which greatly contributed to his recovery. Notwithſtanding however he grew delirious, and a deafneſs came on. Even under theſe circumſtances, ſuch quantities of Bark were given, under a notion of its being a putrid Fever, that his ſkin from the hips downwards turned perfectly yellow, and grew rough with a dry ſcurf that came out upon it, as if it had been tanned; a ſenſe of great heat being felt in thoſe parts, from the acrid ſtate of the humours, and obſtruction of the ſkin. He lay ill attended with delirium for ſome time, but by mere dint of ſtrength at length rubbed through this dreadful Diſorder. When he recovered his ſenſes, he had no recollection of any thing for a month paſt, and was very weak and greatly emaciated. A ſore that, perhaps by long lying in the ſame poſture, came on his hip, and diſcharged freely, ſeemed to contribute to his recovery. The Diſeaſe however left a degree of deafneſs behind it, and alſo the foul humours not diſcharged fell into one leg, which continued ſwelled for ſome time; pointing out plainly enough the defect of a due criſis. And no wonder, when ſuch quantities of Bark were given during the height of the Fever.

A Woman who had a ſore in the leg, which dried up, was taken with a Fever of the ſpotted kind, attended with the ſame intolerable ſtench, that accompanied thoſe in the Workhouſe, in a large Town near us, ſome years ſince. She held out a fortnight, but the caſe proved fatal.

There was a very extraordinary caſe in Shropſhire. A Man ſubject to a ſore leg, on lying on the ground, probably after work-

ous Fever, and upon as good grounds.—Sometimes a violent hæmorrhage from the noſe came on, in theſe Fevers, towards the end of the Diſorder*.

In the foul, hot weather, in the beginning of Summer, ulcerated mouths, and eruptions on the lips, both in and out of Fevers, and alſo pains in the face, became epidemical. Burning Fevers accompanied with pleuriſy and inflammation of the lungs, were alſo very common†; the matter of the Diſeaſe in many inſtances, being determined towards the end of Fevers, to the hands and feet, in thoſe who recovered. Theſe ſwellings, which were conſiderable, and often attended with great coldneſs when in the feet, that ſeemed to ariſe from an inactive ſtagnating vapour, continued ſometimes for a month or more, attended with a very lingering or ſlow Fever, and a ſtate of great weakneſs.

working, fell aſleep, and while his pores were open, was licked by a dog on his forehead, who had juſt killed an Adder. After which both that and his eye ſwelling, a poultice was applied. However he was ſoon ſeized with a delirium, and after that a Phrenzy; and was ſo ill, that after two days, he ſeemed to be dying. But he came to himſelf, and after a day or two more was able to go about buſineſs. A relapſe, however came on. And notwithſtanding the Diſorder might appear to be brought on by the abſorption of the poiſon of the Adder, it evidently proved fatal for want of criſis,—This febrile caſe may ſerve to ſhew in a conſpicuous light, how accidents and occaſional cauſes, that intervene in or precede Diſorders, are often miſtaken for the true one: which undoubtedly in this fatal caſe, reſided in the foul blood of a ſcorbutic habit, heated at firſt, and the veſſels put into action, by the infuſed venom, the Fever and its ill effects being ſtill farther increaſed, from taking cold by ſleeping on the ground.

* An hæmorrhage of this kind happened particularly in a young Woman.

† Horſes about this time had alſo bad colds and coughs that killed ſeveral, and broke the wind of others. And ſo peſtilential was the Air abroad, that the plague itſelf broke out, early in the year, on the coaſt of Barbary.

But

But if theſe ſwellings did not come on, and the peſtilential matter could not be thus thrown out, in bad caſes, and no ſuch effort was made, the whole maſs of blood corrupted, and the Perſons died putrid.

In the very hot, exceeding foul, and hazy weather, after this, great numbers of people were taken ill of theſe lingering Fevers, and attended with great weakneſs and a variety of complaints*. There were alſo more violent caſes.‡

In the ſultry, cloſe weather, in the middle of Summer, after the remarkably violent thunder and lightning, and the fall of great quantities of rain, the burning Fever with Diarrhæa and Dyſentery, ſimilar to that in the French and Spaniſh Fleet when before Plymouth, in the hot weather of the Summer of 1779, immediately came on with us in the

* A lingering caſe of this kind happened in a Woman of a ſcorbutic habit, who had reduced herſelf by ſuckling her child too long. She had a ſlow Fever attended with a cough, a Teneſmus, and indeed every effort almoſt that nature could uſe to diſcharge the tenacious matter, without a due ſecretion of it from any of the glands or Emunctories. Great irritability of the fibres, weakneſs and lowneſs accompanied her, and ſhe was in great danger of falling into a conſumption, but I do not know the event of her caſe.

In another Woman one of theſe lingering Fevers, with a cough and great debility, ended in a tertian ague. The cure of which however was not attempted, under theſe circumſtances, by any preparation of the Bark, but by the uſe of a ſaline mixture, with that of a vomit before the fit. After this method a plentiful expectoration came on; the cough firſt went off; then the cold fit of the ague, and the Fever itſelf after the next paroxyſm. When, after this pretty perfect criſis, ſhe took a light preparation of the Bark thrice a day, to reſtore her ſtrength, and compleat the cure.

‡ A Man about 33 years of age, after drinking too plentifully, and then heating himſelf by mowing, was attacked with a Fever attended with delirium; a Coma following it on the third day, and he dying on the fifth.

center

center of England‖, and alſo became as epidemical in London; and, I believe through the whole Kingdom, as the Influenza was laſt year. And people affected with them, and eſpecially with the latter, had not only extreme pain, and great weakneſs and lowneſs, but alſo violent ſpaſms, and internal convulſions, and alſo great thirſt. The flux often hanging on ſo long, that many of thoſe, in London in particular, who weathered the Diſorder, were however ſo haraſſed, reduced and emaciated by it, and ſo perfectly worn out*, that they looked as the people did who had the peſtilential Ague in the eaſtern part of the Kingdom, more like ſpectres than living ſubjects. The Influenza alſo began to appear again; and thoſe who had coughs laſt year began now to be afflicted with them again: the Diſorder at length frequently ending in a conſumption. There was alſo the ſame dropſical tendency, in ſome caſes, after burning Fevers, as there was after the ſcarlet Fever and ſore throat in 1778, and the burning Fevers deſcribed by Hippocrates under a peſtilential ſtate§.

‖ A Man and his Wife, who lived in an houſe near which ſome lightning fell in the night of July the 12th, as ſoon as they ſmelt the ſulphurous fumes were immediately attacked with ſickneſs at the ſtomach and a Diarrhæa.

* Some Children, in a languiſhing ſtate after the flux, were relieved by opening iſſues; which had alſo had a good effect upon them, ſome years before, in the Chincough, when nothing elſe would do.

§ In a Man who had a burning Fever, and pleuretic complaints, with no criſes, the morbid matter fell into his legs, and he was apparently dropſical: however by the help of bliſters to his thighs, and the application of cabbage leaves to his legs, the latter began to ſubſide and grow warmer. But upon the return of hot weather, being attacked with a violent Diarrhæa, his legs grew cold, and he died plainly from the want of a due ſeparation of the tenacious peſtilential matter of his Diſeaſe: it falling into the extreme parts, and there ſtagnating, after the manner of the Plague, through its inaptneſs to be kept in due motion, and the weakneſs attendant on the caſe.

Many

Many died of theſe fluxes in burning Fevers, and of burning Fevers without them, and alſo of ſome joined with an inflammatory confinement of the bowels, Diſorders now very common likewiſe§. Many alſo dropped off of lingering Diſeaſes and declines†:—and there were ſome remarkable inſtances of ſudden deaths*.

Peſtilential Agues were as bad in Northamptonſhire, and the eaſtern parts of the Kingdom, as they were laſt year, and began now to appear in the center of it, amongſt us‖. And

§ One of theſe Inflammations of the bowels, complicated with a ſtrangulated hernia, proved fatal though the latter was returned.

† A Gentlewoman, and two young Perſons in one family, thus went off in declines.—Cuprum ammoniacum and Bark were now the faſhionable medicines, in ſome lingering Diſorders or chronical complaints: the former wearing down perſons already too much upon the decline, and the latter confining the morbid matter itſelf, the chief ſource of theſe Diſorders.

* A Lady in London, not in years, died ſuddenly in her Chair.

‖ In the latter end of Summer there were three tertian Agues in which the Bark was given, or attempted to be given, and would not agree. The firſt caſe was that of a young Man who, after taking a Vomit, began the uſe of it, but after the firſt doſe was affected with ſuch difficulty of breathing as forced him to deſiſt. The ſecond inſtance was that of another young Man, who not only took a Vomit, but purſued for a time the uſe of ſaline medicines, and alſo took a doſe of Calomel before the Bark, in an uſual quantity, was taken between the fits. But, though in this caſe, the Ague did not return, the Patient became feveriſh with pain in the head, and was not able to repeat it. The laſt inſtance was that of a young Man alſo, but of a groſs habit. The Bark in this caſe was adminiſtered in decoction, without, as far as I could learn, the uſe of either a Vomit or Calomel, or even an aperient medicine of any kind. The conſequeuce of which was that

And ſo fatal a ſmall Pox attended the Peſtilential State of this year, that no leſs than nine Perſons were ſaid to die of it by Inoculation, in and near one ſingle Town. For no Diſorder that came in, and appeared in and ſince the year 1778, had wholly ſubſided and went off, not even the ſcarlet Fever‡. And as to all the reſt, ſo far were they from abating, that they had increaſed in violence and malignity; only going off for a time, and then returning again, at intervals, with redoubled force. Paſſing from place to place, and going off in ſome parts, and appearing in others, as the ſituation of places, ſeaſon of the year, ſtate of the atmoſphere, and condition of bodies, as having had them before or not, or other circumſtances diſpoſed them either to relax or rage, in different parts of the Kingdom, among people whoſe bodies were inclined to them*.

When the cloſe ſultry weather abated, and the Air grew rather cooler towards the end of Summer, many were much diſpoſed to a want of appetite. And notwithſtanding the more temperate ſtate of the Air, the burning fever with flux ſtill went on, and alſo through Autumn and

he was ſeized in the next paroxyſm with delirium, and alſo a convulſive fit. And though both Calomel and other aperients were now given, it was all in vain. For in the next fit, after going to ſleep as uſual, it coming on in the night, he was attacked, without awaking or coming at all to himſelf, with a locked jaw and a coma; and, notwithſtanding all the means that could be uſed, remained in this inſenſible ſtate till he died on the night following.

‡ There was an inſtance of the ſcarlet Fever, but without the ſore throat, in a Woman; and more of miliary puerperal Fevers, with bilious diſcharges and inflammatory ſymptoms as of late in them.

* Not only the human race were greatly affected by this extraordinary intemperature, but there was alſo a kind of Fever among Dogs this year and the next, that was attended with a running at the eyes; a loſs of the uſe of their hind legs came on not long after, and in the end it killed moſt of thoſe that were ſeized with it. Horſes alſo were greatly affected with Diſorders, as I have already obſerved.

Winter,

Winter, and was very fatal†. And beſides the complaints already mentioned, it was often attended with a terrible ſore throat, as the ſcarlet Fever was, an undoubted proof of its highly peſtilential nature‡.

And there were not only fluxes in theſe Fevers, but alſo ſome Caſes attended with violent inflammation and conſtipation of the Bowels in the latter end of the year, as there had been in the preceeding parts of it; ſeveral of which proved fatal. Some alſo had ſore throats with them, and ſome peripneumonic complaints; while in others the Diſorder at firſt attacked the face externally, but ſoon after the brain, attended with a rapid increaſe of Fever with delirium. There were alſo other bad ardent Fevers, unattended with any ſuch local complaints§.

In

† A ſtrong Girl 3 years old, died of a locked Jaw, in 24 hours after being ſeized with a Diarrhæa attended with a Coma.

‡ A Man in London who had had a Diarrhæa whether ill treated or not, died in 24 hours after the coming on of a ſore throat.

§ A Gentleman near 60 years of age, after a ſhivering fit, was ſeized with a burning Fever attended with a vomiting and alſo a Diarrhæa, which latter continued ſeveral days, and, if not reſtrained by medicine, went off itſelf. After this however he made bloody urine, for which he took a good deal of Bark in ſmall doſes, and he alſo drank heating liquids, ſuch as brandy and water, on account of lowneſs. Soon after the uſe of theſe things he began to complain of a burning heat in his bowels, as great as if fire itſelf was in them; and his ſkin continued as it had been haſky and dry, but not hot, the heat in bad burning Fevers lying chiefly in the internal parts. After the Diſorder had remained for ſome time in this lingering ſtate, he was at length taken with ſpaſms and ſubſultus tendinum about the 21ſt day. Under theſe difficult circumſtances attended not only with delirium in the paroxyſms of the Fever, but great langour and weakneſs, and alſo dejection of ſpirits, as well as a comatoſe diſpoſition joined with great ſigns of putridity, he was relieved by the uſe of Camphor Julep. acidulated with vinegar, and a ſmall

In the Winter many died from Conſumptions from impoſtumation in the lungs, and of other chronic Diſorders; and there were alſo, as in the Summer, many ſudden deaths. Many were alſo ſubject to ill-conditioned external ſwellings and impoſtumes, very ſlow in their progreſs to ſuppuration; and the Intermittents of this extremely cold ſeaſon were very bad ones, and attended with uncommon ſymptoms‖.

CHAP.

doſe of James's Powder taken at night. After the uſe of which a free perſpiration came on over all the body attended with a ſound ſleep. In the morning his pulſe was riſen conſiderably; a general natural warmth being diffuſed over the whole ſyſtem, attended with, inſtead of a lifeleſs look, a lively caſt of countenance; the delirium, ſpaſms, ſubſultus tendinum, and comatoſe diſpoſition being all gone off. After this he made ſome urine that depoſited a brown coloured ſediment, and his ſweat had an offenſive ſmell. And though he imprudently indulged an enormous appetite, that came on immediately afterwards, yet by the uſe of a gentle vomit to relieve his ſtomach and of a light decoction of Bark to ſtrengthen him, he gradually recovered. Not however without a dropſical tendency in ſwelled legs, which was taken off by the uſe of water at Cheltenham the following year. After which in the Autumn he had another febrile effort by an Ague, about the time he was ill of the Fever the year before, which at laſt reſtored him to a good ſtate of health.

Another perſon had a burning Fever this Autumn with a violent Diarrhæa for a fortnight; but, as he was only ſupported with thin Rice-gruel, uſed no reſtringent medicines, and the matter of the Diſeaſe had a free diſcharge, he ſoon recovered without any bad ſymptoms.

One of theſe Fevers, a puerperal caſe, in a young Woman of her firſt child, attended with an inflammation and tumor in the abdomen, and a Diarrhæa, proved fatal in a few days. She had got up too early after parturition in the Winter, and drank brandy not only with but without water, as I am well informed.

‖ There happened in this inclement ſeaſon, a tertian Ague, attended with very peculiar complaints and ſymptoms. Not only with oppreſſion on the breaſt, cough, and a plentiful expectoration,

# CHAPTER VII.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in 1784.*

AS the preceeding part of Winter had been, ſo was the end of it ſevere; but the Spring ſo uncommonly ſo, as to be a perfect continuance of Winter in that naturally pleaſant ſeaſon. Having hard froſts with a foul and foggy Air, great falls of ſnow, ſleet, and hailſtorms, and ſuch cutting, raw, inclement, and boiſterous weather, as had not been known in that ſeaſon, during the memory of Man; and as if all the cold, that had been wanting to it in ſome preceeding years, had been collected, and came with full force in this. But notwithſtanding all this, ſigns were not

pectoration, but alſo violent pain in the Bowels upon the riſe of every paroxyſm of the Fever, with many ſtools or rather ineffectual efforts to diſcharge the offending matter; a teneſmus coming on, either when purgatives were given or not, accompanied with great lowneſs and faintneſs on the acceſs of the cold fit, though the Patient was a ſtrong young Man, about 20 years of Age and in the flower of Life. Every return of the Diſorder at firſt gained 7 hours: and though he ſweat after each fit he gained but little relief from it, nor was there any appearance of criſis in the urine. However, after taking a vomit the diſcharges by the bowels became more copious. And though the pain in them returned every paroxyſm, expectoration ſtill went forward, and his urine alſo at length grew turbid; and in a few days depoſiting a good ſediment, he recovered from the Diſorder, and obtained a good ſtate of health, that continued for ſeveral years.

wanting of there being a conſiderable portion of the particles of light, or heat in the atmoſphere*, as early as the latter end of Winter; a luminous Zone one night, extended acroſs the hemiſphere, from eaſt north eaſt, to weſt ſouth weſt, appearing at that time; and there being, by the middle of Spring ſome very violent lightning and loud thunder, ſucceeded by temporary returns of warm, and even hot weather, and ſome very ſultry before the end of it.—The beginning of Summer however conſiſted of very cool, damp weather, or of a warm, relaxing, and moiſt atmoſphere. And though there was ſome very hot weather, in the more advanced part of it, yet it was frequently cut off by returns of ſome very unſeaſonably cold: for this year was ſubject to ſudden great changes, as well as ſome preceeding ones.—The Autumn correſponded perfectly with the Spring, and was as cold for that ſeaſon; and the beginning of Winter ſo ſevere, that the Thermometer was at 33 degrees below the freezing point; there being then great falls of ſnow, and much more, and alſo rain, about the end of it.—As to tempeſtuous and very variable winds, they were now become ſo common to the climate, that they returned every year, in the ſeveral parts of it, with great violence, but never reigned in any one through the whole, with greater force and power than in this. The Air, at ſome other times, being ſo calm and cloſe, as to be perfectly ſtagnant, particularly in the beginning of Autumn; and having not only a common general impurity in it, more or leſs, but being ſometimes infeſted with thick fogs; ſome of which were alſo blown with the wind out of the ſouth in the middle of Spring. But as to falls of ſnow or rain, they, no more than thoſe of laſt year, notwith-

* This had been the caſe, as I had already obſerved, in ſeveral years preceeding; and I ſuppoſe always is, when there is a great foulneſs in the air, that engages and detains the particles of heat, till they accumulate and predominate in it, and for want of due circulation, in a ſtagnating ſtate of it, bring on that cloſe heat, obſervable at times, as vapour joined with cold does the remarkable rawneſs and ſeverity, there has been of late years, at others,

ſtanding

ſtanding the great ones of both, eſpecially the former, which fell in the latter end of the preceding Winter and Spring, as well as in the cloſe of this year, were by any means equal to thoſe that fell in the two former years 1781, and 1782.

In the latter end of Winter there were very bad burning Fevers in ſeveral Towns, here in the heart of the Kingdom*, eſpecially cloſe ones not well ventilated, wherein the Streets were narrow; ſome of thoſe affected with them complaining of great pain and ſtiffneſs in the Fauces, and uncommon heat in the throat and ſtomach, peſtilential ſymptoms; there was alſo a fatal kind of ſmall Pox; Fevers with fluxes likewiſe affected the Felons in ſome Jails, even not very cloſe ones, from the vaſt numbers confined in them.

But above all the peſtilential or burning Ague, and intermittent Fevers of like kind, that during ſome late years, in low and damp ſituations, had infeſted the eaſtern parts of the Kingdom, and ſhewn themſelves here in the internal parts of it, laſt Autumn, began now, and in the following extremely cold weather in the Spring, to be very epidemical.—They frequently followed no regular type; different kinds turning ſometimes into each other for a while, and

* In the Spring a Woman who had been delivered 12 days, was attacked with inflammation and great tenſion in the abdomen, obſtruction of the bowels, and a puerperary Fever. She was however relieved by the loſs of ſome blood, with the uſe of gentle aperients, emollient Clyſters, and afterwards that of a little Calomel joined with an Anodyne; for ſhe had but little milk, and that very viſcid. After the uſe of the latter ſhe began to perſpire, and in a day or two did ſo freely; her bowels alſo becoming free and open. A Fever attended with cramps, or convulſions of the muſcles, was alſo relieved by bleeding. But after after this a puerperary Fever proved fatal in 8 days, after delivery of a dead child.

then reſuming their firſt forms§. They ſeized Perſons chiefly of weak habits, when the weather at times grew colder, upon the leaſt expoſure to the Air, and often without, and were of the kind taken notice of by Hippocrates in Stat. Peſt. viz. *tertianæ, quaternæ, aſſiduæ, diuturnæ, incertæ et vagæ, implacidæ et inconſtantes*†. They were very violent and ſevere in the fits, whether they were Quotidians or Tertians, affecting the head with intenſe pain, delirium, and ſenſations ſometimes ſo irritating as to be almoſt intolerable, and the body with ſuch great internal heat, that Perſons afflicted with them were perpetually calling out for cold water‖, and would hardly take any thing but that and the juice of Oranges. Some complained, at times, of pain equal to that of a knife ſtruck into the brain; others were

§ A Man who had taken the Bark and repeated it at times, for three months, had conſtantly returns, in the form of a treble Quotidian, the true Quotidian, the tertian, and quartan; none of them going on regularly but continually changing into each other.

† Another who had taken no Bark, had a treble Quotidian. And another who had uſed the Bark ineffectually too early, had an Ague hanging on him a whole year. It would appear in the form of a Quotidian, for two days, and then intermitting one, at other times two days, take on it that of tertian, or quartan, being a mixture of all of them. The chief preparative for his cure was alkaline ſalt with ſteel, after the due uſe of which the Bark at length ſucceeded. And perfectly ſimilar to this is the effect of the improper uſe of the cold bath in many Diſorders. For though it will often reſtore the Conſtitution, for a time, to an apparent ſtate of health, and bring on a kind of equilibrium in the body, when the blood and juices are foul theſe cannot be laſting.

A young Man of a ſcorbutic habit, ſubject to eruptions on the ſkin, and but an indifferent ſtate of health, upon uſing ſea bathing appeared to be greatly reſtored. But what was the conſequence? Why a year after, by the determination of the foul humours to the inward parts, by thus locking up the outward, he had impoſtumations and ulcers internally and was dying of a conſumption. See my obſervations on the abuſe of ſea bathing in my Treatiſe on Cheltenham Water.

‖ See Thucydides of this ſymptom in the Plague of Athens.

affected

affected with violent ſpaſms, like the cramp; as alſo with vaſt load and oppreſſion at the ſtomach, and great pain in the bowels*; having withal great heavineſs in the eyes, and a foul caſt of countenance, eſpecially upon the return of theſe Diſorders in bad habits, always ſure to happen, after the matter of the Diſeaſe had been unduly confined by the early uſe of the Bark. Nay the pain in ſome inſtances was ſo violent in theſe Diſorders, as to affect People like a kind of Plague, which was their true nature, as I have already obſerved. Many caſes alſo were very lingering and of long continuance, and ſorely afflicting; being attended not only with great weakneſs, but alſo lowneſs of ſpirits. Some had treble Quotidians; one young Man in the flower of life, after a ſecond ill-timed bleeding that too much reduced him, a double tertian.

Theſe Agues often uncertain and variable in their own nature, as I have ſaid, and apt to change days of return, were particularly ſo when the Bark had been improperly given. Nothing anſwering well in them, or continual Fevers, but obtaining a good criſis, by waiting properly upon them, where this could be done, as it generally might when no large evacuations were uſed, or elſe the appearance of eruptions externally‡. Thoſe which were thrown off

* A Child, upon taking the Bark early in an Ague, had great tenſion in the bowels, it not being capable of curing the Diſorder; which was relieved by ſaline and aperient medicines with Rhubarb and Sal. Polychreſt, after the uſe of which it ſeemed to be getting well; upon repeating Bark however feveriſh ſymptoms came on again, and tenſion in the bowels.

‡ A young Man recovering from an Ague, upon uſing the Bark had an ill-loooking tumour, that formed itſelf upon one eyelid: and another, under the ſome method, an inflammation in one eye.--A Girl, after one, had a tumour in the internal part of one thigh: and another a violent pain in the head, attended with cramps, which was relieved by bleeding, and an impoſtumation in one armpit.— A young Man alſo, of a ſcorbutic habit, after a fit of the gout, had boils in ſeveral parts, in order to diſſolve

off by the uſe of Bark being apt to return, and the perſons affected with them to be ſubject to pains in the teeth, and many worſe complaints, nay ſometimes death itſelf, ſooner or later, brought on by them§. Many of them being but too

diſſolve and diſcharge from the body, the remains of tenacious morbid matter otherwiſe inſeparable. Now every Man muſt be ſenſible that all theſe caſes moſt evidently ſhew, the peculiarly tenacious, foul ſtate of humours in peſtilential Conſtitutions.

But extraordinary ones are in general ſought after, as if true Phyſic were well underſtood, many of which I ſhall give. But to inſiſt in thoſe alone is a great error: for the inſtilling true notions of the cauſes of Diſeaſe in general, and the eſtabliſhment of the rectitude of common practice in ordinary caſes, is a matter of moſt uſe and conſequence. Let no one then be offended with the ſimplicity of my obſervations, which tend to declare more than perhaps ſome are aware of.

§ A married Woman about 30 years old, who had the Ague this Spring, was ordered to take large quantities of Bark early in the Diſorder. And through an almoſt unaccountable want of diſcernment, and good knowledge of the true nature of the preſent, and indeed of all intermittent caſes in general, and the right method of treating them, brandy in pretty large quantities, was alſo given towards the latter end of it. She lived a month or more, but was delirious and perfectly inſenſible for a week before ſhe died.

A Gentlewoman near 50, to whom the Bark had been given early, in one of theſe Agues, laſt Autumn, had this Summer ſwelled legs; after ſome months, falling into a ſlow Fever that gradually deſtroyed her.

A young Man alſo who had long complained of great internal indiſpoſition, and had a ſlow Fever, for which Bark had been improperly given, before there was any due diſcharge of it, after over-heating himſelf, by working hard, was attacked with an high Fever with delirium that carried him off.

Thus fatally ended all theſe caſes, wherein the Bark and ſtrong liquors had been injudiciouſly given, and where no effectual means had been, or perhaps could be, afterwards uſed, and Nature could not help herſelf. And in Agues of a prior date, and not of ſo obſtinate and dangerous a nature as theſe

peſti-

too apt of themſelves to end in dropſies both of the anaſarcous

peſtilential ones, a Gentlewoman in the decline of life had an intermittent ſo fixed upon her, by the improper uſe of this medicine, that ſhe became ſubject to a return of delirium or kind of inſanity every other day, at times, which by degrees ſo weakened her faculties, though her ſtrength of body kept up, that it at length degenerated, during thoſe times of return, into a kind of Idiotiſm. A young Man however, to whom, in a ſharp tertian Ague, the Bark had been adminiſtered, in the ſame improper manner, too early laſt Autumn, though he was attacked with it again this Spring, yet, after the eruption of an uncommon ſort of ſcab upon his lips, attended with a ſoreneſs, and even rawneſs in the mouth, throat, and Oeſophagus, from the ſeparation of the internal membrane lining theſe parts, grew better, the Ague going off without the uſe of Bark. And though he afterwards had ſo bad an hoarſeneſs and dry cough as to threaten a conſumption, yet upon the appearance of a ſwelling of and eruption on one finger, though the former tended but ſlowly to ſuppuration, the Diſorder began to give way, and by the help of ſaponaceous expectorants, went, at length, happily off.

A Gentleman alſo 50 years of age, who had taken two vomits and ſome calomel, and waited a month on his Diſorder before uſing the Bark, by imprudently indulging himſelf, in an imperfect ſtate of the criſis, in both eating and drinking too much after the Ague was thrown off, brought on a ſtroke of a Palſy. However as ſome febrile efforts were not wanting, even in this ſtate of his caſe, by the help of proper aperients and attenuants he recovered, and ſoon regained a good ſtate of health.

A Perſon alſo who had taken Bark twice early in one of theſe peſtilential Agues, received great relief from a remarkable Ptyaliſm that came on, as well as from diſcharges from his bowels, and thereby ſoon recovered.

A Woman and a Boy recovered by merely waiting on the Diſorder till the criſis came on, after the method of Hippocrates; the former in ten weeks, but the latter, indeed, not till after five months. They however regained ſoon after good health and ſtrength, without the help of medicine, as was the caſe alſo with a Gentlewoman 50 years of age, ſome time after, who could not be

cous and aſcites kind†, or in hoarſneſs and cough, and at length conſumption*; but more eſpecially when treated either by weakening or confining methods. The uſe therefore of great evacuations§, early in a Diſeaſe that, even after them, muſt be waited on, and the bringing on thereby, on account of the weakneſs that ſoon unavoidably followed, a kind of neceſſity for the premature uſe of the Bark, was certainly very male practice. For often, even when time had been allowed to theſe Agues, and their criſis waited for, though in vain, they were very difficult of cure. It being ſometimes neceſſary to have recourſe to gentle, continued evacuations by the bowels, in order to draw off ſome of the tenacious matter and viſcid humours; ſuch evacuations affording the moſt effectual relief, till the reſt was ſo far attenuated by repeated efforts, as to become capable of being thrown out externally in ſcabs about the lips and noſe, or eruptions on other parts. For it was of ſo pernicious and highly peſtilential a nature, that Ptyaliſms often came on in the latter end of ſome of theſe intermittent, as well as of continual Fevers, to diſcharge it. And ſome of them

be perſuaded to take any, neither during the Diſorder, nor after it went off.

† * A Man who had lived freely, and was paſt the meridian of life, after having an Ague this Spring, for the cure of which he took the arſenical preparation called the white Drop, had 5 galls. of water, drawn from him in Autumn, in an aſcites that began to come on ſoon after the Ague went off. This Diſorder however proved critical; for, upon taking ſome ſtrengthening bitters, he recovered health and ſtrength, notwithſtanding the large quantity of ſerous fluid that had been collected in him.—A Child however, who had an aſcites joined with a conſumption, died in the beginning of Winter.—There was alſo a caſe of a dropſy and conſumption complicated, that came on after an Ague in a ſuckling Woman. A young Woman likewiſe, who had an Ague in the Spring, died of a conſumption in the decline of the year.

§ A ſtrong Man attacked with a pain in one knee intenſely violent, a Diſorder now very common, upon the uſe of bleeding ſunk amazingly, and was not able to bear a repetition of it.

obſtinate

were ſo obſtinate, and hung on ſo long, that it became neceſſary to uſe ſome peculiar methods before they would give way, eſpecially in caſes wherein the Bark had been improperly given.

While theſe intermittent Diſorders prevailed, there were numerous inſtances of eruptions on the ſkin both in Fevers‡, and out of them, attended with great itchings, and breakings out on the noſe and face, and ſoreneſs of the eyelids. Some of theſe eruptions were uncommonly large, breaking out in large blanches, and others reſembled the kind called ringworms, but all the Perſons who had them, at leaſt while they continued, eſcaped the Ague. There were alſo many remarkably bad Eryſipelas's, both of the gangrenous kind, and others: and ſome of them were attendant on continual burning Fevers, and preceeded by ſhiverings*; others were critical†, and accidental§. Many alſo were ſeized with violent external pains, particularly

‡ One of theſe eruptions came on in a puerperary caſe, upon the coming of the milk.

* A young Woman of a groſs habit, who uſed to indulge her appetite too much, and took little exerciſe, had the Ague in the Spring, and the decline of the year was attacked with a continual Fever, accompanied with an Eryſipelas all over the body that proved fatal. Another very dangerous one, came in one leg, after repelling an eruption, falſly thought to be the Itch, in a Woman alſo of a groſs habit.—There was alſo a violent Eryſipelas in the face, that accompanied the eruption of the ſmall pox by Inoculation: for eruptions of that kind were now very commmon upon the appearance of that Diſorder.

† An old Gentleman, after a fit of the Gout in the Winter, had one of theſe gangrenous Eryſipelas's that proved critical.

§ Another Perſon, who had the Ague, was attacked with one in one leg, whereon he had received a kick from an horſe; upon which the Ague left him. See Hippocrates's obſervations on this Diſorder, in Statu Peſtilenti.

pecu-

in the knee‡, foot &c. preceeded, in ſome inſtances by a peculiar ſingultus, or ſighing, and great lowneſs and dejection of ſpirits, even for months before. For Diſeaſes, by the power of ſevere cold, with a foul atmoſphere, were raiſed to ſo great a pitch of violence this Spring, and were attended with ſuch intenſe pain, and other inordinate ſymptoms, as to become, as I have already obſerved, a kind of Plague§. And yet they were accompanied with great faintneſs alſo§, and an utter incapacity of bearing large evacutions

‡ A Man attacked in this manner with pain in the knee, was relieved indeed by bleeding and a mercurial purge; however upon the receſſion of the peſtilential matter into the habit he was taken with the Ague.

§ A Girl about 15, of a bad habit, and whoſe Brothers and Siſters were ſubject to lingering Diſorders, and inclined to conſumptions, and convulſive fits, before the eruption of the menſes, was attacked this Spring with a continual Fever, with exacerbations every night, as is the caſe in common; having vaſt heavineſs of the eyes, and a foul, ſqualid countenance. The caſe proved perfectly uncritical; and ſhe remained without ſleep, ſweating, or any other favourable diſcharge, till ſhe, at length, became almoſt like an Ideot; or ſeemed to have, as one might have thought, a tendency to a maniacal diſpoſition, had ſhe not, when ſhe grew able to walk about, ſtill continued to have a full and quick pulſe, and an increaſe of Fever, as before, every night, with little or no reſt, partial ſweats burſting out ſometimes upon the forehead, and ſhe having an incapacity of having ſtools in a regular manner, either naturally or by medicine. And therefore the affection on the brain may be more properly called a continued delirium, attendant on her ſlow Fever, though ſhe was often upon her legs. She remained in this condition, for ſeveral weeks, growing greatly emaciated, and looking very pale and wan; often muttering to herſelf at intervals when ſhe was more ſenſible, that no one knew how ill ſhe was, and ſeeming to deſpair of recovery. And it happened accordingly; for though ſhe was ſomewhat better, on the coming on, and during the warmth of Summer, ſhe died of the Diſorder in the Autumn.—Here is a caſe wherein the tenacious, foul, peſtilential humours were not attenuated, the texture of the

evacuations of any kind, eſpecially drawing of blood; all of them bringing down the ſtrength too faſt, and protracting the criſis†.

Along with other violent complaints, many were affected with great inflammation in the rectum, attended with ſuch ſhooting pain, as if a fork were ſtruck into it; and with bad kinds of Piles with large fluxes of blood, Teneſmus, and violent pains in the bowels. And when Summer came on, inflammations in the bowels were pretty frequent, Pleuriſies and Diſorders of the lungs, Rheumatiſms, and other dangerous and ſometimes mortal burning Fevers, unattended by theſe Diſorders, as in former years. There were alſo ſore Throats, ulcerations in them and in the mouth, eruptive Fevers of the ſcarlet and miliary kind§, and the Meaſles. Diarrhæas in Fevers likewiſe came on ſooner in the year than uſual, and there were ſome caſes of the Dyſente-

the blood opened, nor the veſſels emptied and conſtitution beforehand relieved by the uſe of purging mineral waters, or any other proper methods, that, notwithſtanding the long continued efforts of nature, in a ſtrong conſtitution, and the uſe of Calomel in its decline, had a fatal termination.

† An elderly Gentlewoman, of a naturally ſtrong and good habit, in a Fever attended with a pleuriſy ſhe had this Spring, and in ſome returns ſhe had of it, had blood drawn ten or eleven times. However, after this unaccountable procedure, not properly tending to promote the ſeparation of the matter of the Diſeaſe, and bring on its diſcharge, but reducing her too much, when ſhe was thought to be recovering, ſhe had a ſtroke of a Palſy that carried her off.

§ A young Man had an eruptive Fever, of the ſcarlet kind. A child alſo, after a violent vomiting, purging, and convulſive fit, on the attack of a Fever, the uſe of a vomit and the application of a bliſter, a miliary raſh; it alſo broke out much about the mouth. And though, notwithſtanding all theſe efforts, it had ſtill great heavineſs in the eyes, common now to all Diſorders, yet, upon the coming on of a Ptyaliſm it recovered.—Several pregnant Women alſo had miliary Fevers.

ry§,

ry§: and indeed a concurrence of all the Diſorders that aroſe in 1778, and the beginning of 1781, except the ſcarlet Fever and ſore Throat with its ſpecific ſymptoms, and the degree of violence it appeared in, in the former, with the addition of the burning or peſtilential Ague. And even that Diſorder itſelf broke out in a Family, that came to London, the year following this, with as much violence, and attended with as extraordinary ſymptoms, as in the very riſe of it.

Many died of the abovementioned Diſeaſes during the Summer*. And before, and about the middle of Autumn, many were taken with violent Diſorders of various kinds, that proved for the moſt part very lingering caſes, and difficult of cure. And among the reſt, were very bad, obſtinate, and dangerous Fevers‖, many of them attended with inflammation of the bowels; there were alſo many Agues then as in the Spring. In fact burning Fevers were ſo mortal, about this time, in ſome neighbouring Towns, that, in one little place, five Perſons were buried, one Evening;

§ This Diſorder was epidemical in a neighbouring Town.

* The Plague in the Eaſt indeed, which was ſo violent and fatal laſt year, had been checked by the extreme cold in the beginning of this; not however till half the people in Cherſon were ſaid to dye of it: and it broke out again with great violence in Smyrna this year; being likewiſe very bad on the coaſt of Barbary. There was alſo what was called the Plague at Meſſina; but was in fact the burning Fever attended with Coma ſomnolentum. Thoſe however who had not this unnatural ſleepineſs for 2 or 3 days in the beginning of the Diſorder, were ſaid to die of it.

‖ In one houſe, wherein a young Man died of a burning Fever, another had one with a quinzy; another one attended with a violent pain in the ſtomach; and the reſt of the Family the ſame Fever, after a ſlow manner, without theſe complaints; but all of them with the uſual ſymptoms of great weakneſs and dejection of ſpirits.—In another place a Man loſt his Father and Mother, and 3 Children by theſe Fevers.

and

and the ſpotted Fever was ſaid to have appeared in another. For great indiſpoſition, as I have ſaid, of all ſorts prevailed‡. And the latter end of this ſeaſon was peculiarly remarkable for bad coughs, attended with a large expectoration of very viſcid Phlegm; and for ſlow Fevers attended with great lowneſs of ſpirits, and uncommon debility.

In the cold, raw weather in Winter there were many Fevers with Rheumatiſm; being often accompanied alſo with Diarrhæas, and other ſymptoms attendant on a diſſolved ſtate of the humours. The autumnal cough alſo continued, and prevailed much in this ſeaſon. Coughs alſo were very common towards the end of, and after ſlow Fevers, and long continued Diſorders, as in 1778*. And, in the latter end of Winter there were many caſes of inflammation of the bowels, as in Autumn; and ſuch bad burning Fevers at Cheſter, that it was reported the Plague was there.

As to chronical Diſorders, there were great numbers of conſumptions, and among multitudes, of Dropſies, one of the Ovary; in which the collected ſerous matter was very viſcid, and the caſe fatal ſoon after its diſcharge. There were alſo other peculiar caſes, one of which was an aneuriſm in the right ſubclavian artery, in a Man§; another an uncommon

‡ About this time there was a fatal puerperary caſe, in a Woman of a relaxed and ſomewhat oppreſſed habit: ſhe was ſeized with convulſions ſoon after delivery of a firſt child, and died in a few days; remaining moſt of the time, in an oppreſſed, inſenſible, and weak ſtate, with very ineffectual efforts, either of nature or attending the uſe of medicine, for her relief. And though weakneſs and oppreſſion of conſtitution, may, in ſome meaſure, account for this, yet it will by no means for the whole, for the languid and foul condition of bodies, during this peſtilential ſtate, has often been very extraordinary.

* Hippocrates takes notice of this diſpoſition to expectoration in the decline of burning Fevers, and alſo of the ſtrong tendency violent ones of this kind had, among the Greeks, to end in a fatal Peripneumony.

§ The Man who had this Aneuriſm, was about 30 years of age, of a ſhort ſtature and ſmall make. It began during a cold that hung long on him laſt Winter, attended with great oppreſſion from phlegm; the heredi-

common Tumor, ſuppoſed to be a ſchirrus, in the internal part of one ſide of the breaſt, alſo in a Man, and ſo large as to diſtort the ſpine; another was a peculiar conſumptive caſe, in a Child, 9 or 10 years old, attended with a diſcharge of bloody Urine‖.

tary and acquired tenacious matter wherewith his little, though tolerably ſtrong body, was loaded, making even this large and ſtrong veſſel, by degrees give way. It did not increaſe much during the warm months, but greatly, on the coming on of cold weather next Winter; and burſting early in the Spring next year, deſtroyed him. It is to be noted that he was a Miller by trade, and conſequently uſed to lift heavy burthens; which probably might contribute to the riſe of his Diſorder.

‖ This remarkable caſe aroſe in a little Gentlewoman of a ſcorbutic habit towards the latter end of laſt year; ſhe continuing to make water frequently tinged with blood all through the Winter, and being thereby reduced to a very weak ſtate. Incapable of bearing any active or aperient method whatever, recourſe was had to the uſe of ſmall doſes of ſalt of ſteel, in order to prepare her for the uſe of ſuch farther methods as might be neceſſary in her caſe. And by the help of it ſhe grew better and ſtronger the ſucceeding Summer. But when thus prepared for a mild, alterative method, by the proper uſe of an aperient mineral water, this being neglected in its due ſeaſon, and no effectual means uſed to clear the habit of the radical cauſe of the complaint, and alter the foul ſtate of the blood, it returned, on the decline of the year, with greater violence, when the vicious humours were again pent up by cold, and there was no freedom of perſpiration or other proper diſcharge of them. Even ſo rough a medicine as Calomel was now tried in very ſmall doſes, becauſe it had been uſeful in ſome caſes of this kind, though widely different from this. But this forcible method, inſtead of affording relief, increaſed the flux of blood, as might naturally have been expected, and the weakneſs attending it. Upon which large doſes of nitre were given; which reſtrained indeed, in ſome meaſure, the former, but not being able to carry off its cauſe, ſhe was ſoon after attacked with aſthmatic and dropſical ſymptoms, and died in a few days.

CHAP.

# CHAPTER VIII.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1785.

THE former part of Spring, as laſt year, was uncommonly ſevere, and like a continuance or return at times of Winter; abounding with froſty, raw, inclement weather, and cutting winds out of the northern points*. Theſe were not however ſo tempeſtuous as thoſe about the ſame time laſt year; neither were there ſuch great falls of ſnow; it being through the whole ſeaſon remarkably dry, though the atmoſphere was foul eſpecially about the middle of it, and alſo warm at times with variations of the wind into the ſouth. Much of the latter part of it alſo was very warm, foul, calm, cloſe, and once ſo exceeding hot, as to raiſe Farenheit's Thermometer up to 77; the next day being on the contrary ſo cold, that it ſunk it again to 60. However after cold weather had continued ſome days, it grew warm again, and even peſtilentially hot, the latter end of it being a mixture of both. Thus for want of rain in its due ſeaſon, the Air continued intemperately cold or hot

* I have already more than once taken notice, that, notwithſtanding the extreme cold in ſeveral ſprings of late, there were ſometimes luminous meteors, in the form of arches, encompaſſing the earth, and extending acroſs the hemiſphere at night, ſhewing a great predominance of the particles of light or heat in the Atmoſphere: one of which reaching from the eaſtern to the weſtern part of the horizon, appeared one evening in the Autumn of this very year. But this Spring, notwithſtanding its coldneſs, there was a more unuſual or extraordinary Phœnomenon in Water inſtead of air: the Sea on the coaſt of Suſſex, and ſome other ſouthern parts, appearing ſo light as to reſemble fire, and great quantities of luminous particles iſſuing from the waves, as often as they daſhed on the ſhore.

from the middle to the end of Spring, and even to the middle of Summer†, there being through the power of the former, ſome very extraordinary hailſtorms, even in the middle of this hot part of the year, and by that of the latter, the Thermometer being raiſed up to 80, in a ſituation facing the north, thrice more at ſeparate times as high, and once, I was informed, at leaſt a degree or two higher before the end of it There were however in the beginning of Summer, after the great drought in the Spring, ſome ſtorms accompanied with high winds, and after theſe ſome peculiarly fine gentle rains, though late and out of due ſeaſon, and ſuch as uſually fall earlier in the year, that tempered the Air for a while, and rendered it cool and pleaſant after them, though the change made therein thereby was great, and much affected bodies indiſpoſed§. Theſe were followed by great gluts of rain, through heavy ſhowers that poured down, as it were, and a very vapouriſh and foul ſtate of the atmoſphere; but there was no ſettled rain, though ſo much fell, till the latter end of this ſeaſon.— Thus the Spring was remarkable for extreme cold with great foulneſs of the atmoſphere, a long continued drought, and ſome very calm, cloſe weather, at times, towards the end of it; the Summer for the number of gentle ſhowers that fell in a manner unuſual in this hot part of the year, and the great quantities of rain that afterwards poured down in heavy ones, when the ſky was once unlocked; as well as for the foul ſtate of the Air, and great tranſitions from ſeveral returns of exceſſive heat, and others of moiſture, warmth, and cloſeneſs, to inclement cold.

The Autumn conſiſted, in ſome parts of it, of warm, calm, cloſe, gloomy and very moiſt, and of cold and froſty

† The drought was ſo great as to be almoſt without precedent. It affected part of Germany, France, Spain, Italy, Great Britain, and Holland, and as far as the 46th degree of latitude.

§ Giving a general account of the quantity of rain that falls in the year, without deſcribing the mode of its falling, as well as informing us of the ſeaſon in which it fell, and its power as connected with air and heat, will convey no good ideas of the temperature of the atmoſphere, and its effects on bodies.

weather

weather, with not only a very foul general ſtate of the atmoſphere in both, but alſo fogs in it, that coming in the wind out of the north weſt much infeſted the Air‖; and there was often likewiſe an obſcure ſky. In other parts of it tempeſtuous winds roſe attended with heavy rains, hail-ſtorms, and great falls of ſnow‡.— In the Winter alſo there were ſuch great quantities of both, that travelling ſometimes was interrupted thereby in ſeveral parts of the kingdom, as well as moſt tempeſtuous winds, eſpecially upon the coaſts. There was alſo ſuch cold weather before the middle of it as ſunk Farenheit's Thermometer, here in the heart of the kingdom, to 16 below the freezing point, and ſome very cold alſo in the middle, and towards the end of it. But though there was a great deal of froſty weather, a froſt never continued longer at any one time with us than about a week; it was however ſaid to be very cold indeed in the north of England. As to raw, foul, foggy, moiſt, calm and gloomy weather, ſome of them abounded in the intervals of that which was tempeſtuous with falls of ſnow. For ſome days however, after the ſevere cold in the middle of this ſeaſon, it was warm for the time of the year, though foul; the Air growing ſtill more impure in the cold ſtormy weather at the end of it, thick fogs being then blown in the wind out of the ſouth.

Burning Fevers* with great languor and dejection of ſpirits, high putreſcence†, and ſuch an increaſe in their peſtilential nature, as often to become ſuddenly fatal, ap-

‖ Towards the latter end of this ſeaſon the Air and weather were ſo foul in London that people could hardly breathe.

‡ In Lithuania the weather, for two months, was ſaid to be ſo intemperate that the Crops could not be got in; being ſpoiled by the extraordinary quantities of hail, ſnow, and rain.

* One of theſe in a Child was attended with Coma and difficulty of breathing: and another in a young Woman about 18, among other bad ſymptoms, with great weakneſs of the pulſe, inability and want of natural effort, and alſo inattention.

† The excretions both by ſweat and urine even in a Child were remarkably offenſive.

peared early this year, and in ſome confined ſituations raged almoſt like the Plague§. Agues and intermittent Fevers were alſo attended with great putridity, as well as continual ones; being raiſed by the uncommon ſeverity of the weather in Spring to an high pitch of violence, accompanied with intenſe pain in the head; and frequently turning into thoſe of the continual kind, and having fatal terminations‖. They were in general very intractable, even much more ſo than thoſe of laſt year‡; and were relieved chiefly by diſcharges from the bowels, either coming on naturally or by the uſe of Aperients, this year as well as the laſt*. Among other Diſorders there were inflammations of the bowels as uſual and very bad caſes of them, and many were affected with Hoarſeneſſes and Coughs. The Meaſles, Small Pox†, and Dyſentery were alſo epidemical in

§ In St. Thomas's Hoſpital in London, 20 were reported to have been buried in an Evening; ſome of them dropping off in 24 hours.

‖ A Child in a Quotidian, with this moſt violent pain in the head, had a vomiting for ſeveral days, nothing paſſing by the ſkin. And, notwithſtanding this evacuation, or any methods uſed, the former, in a few days more, became ſo intenſe, as to make it at times, perfectly phrenetical, with very ſhort remiſſions of the Fever. Having black Stools, and other ſymptoms of high putrefaction; in which circumſtances it died in a day or two more.

‡ In an intermittent caſe, wherein the Bark was given early, the Diſorder conſtantly recurred; nor did the Perſon recover till an Impoſtumation was formed, and the matter thus thrown out externally.

* A Boy 8 or 9 years old, who had an Ague 7 or 8 weeks, was relieved at times by diſcharges of bile and phlegm both upwards and downwards; and at laſt had very copious and critical ones of moſt tenacious and offenſive matter both ways before he recovered.

† The ſmall Pox by Inoculation was unuſually fatal; one child droping off through a corruption of the whole maſs of blood, and another going off ſuddenly, in an uncommon manner, with ſymptoms of oppreſſion from phlegm, 6 days after the ſmall Pox had appeared, though they ſeemed to proceed well to maturation; they were indeed both of them of but indifferent habits.—Another after Inoculation with little eruption, was attacked ſoon after recovery with an aſthmatic Diſorder, a complaint hereditary in the Family, which proved fatal.

Another who had alſo been inoculated in the Spring, was attacked, in the beginning of Autumn, with convulſions, ſucceeded by a Fever of what is called the intermittent kind, but which in fact had no real intermiſſion, and was very violent in its paroxyſms; and next Spring with an obſtinate Ague,

in ſeveral places; and towards the latter end of this ſeaſon, the Scarlet Fever and Sore Throat was in London§. There were alſo bad Eryſipelas's, and vaſt numbers had burning Fevers at this time, and in the beginning of Summer: Diſorders being then of a very ſluggiſh nature, obſtinate, and the morbid humours very difficult of ſeparation‖.

In the beginning of Summer, and in Autumn inflammations and humours in the eyes were epidemical: and in the middle of the former, there were ſome very bad caſes of inflammation of the bowels‡; eſpecially upon ſome changes, about that time, from great heat to cold, and many violent complaints of the colic kind*. And the great change of

Ague, and a return of ſuch dreadful convulſions as were more than once very near proving fatal; it was however at length relieved by a critical diſcharge of moſt tenacious humours, that came away in kind of lumps from the bowels.

§ I mentioned, in my account of the Diſeaſes of laſt year, that the ſcarlet Fever and ſore Throat broke out with great violence in a Family that viſited the Metropolis this ſeaſon. One child died; another narrowly eſcaped through impoſtumations in the ears; which diſcharged a quantity of very fœtid, and ſometimes bloody matter, for ſome years, attended with an almoſt total loſs of hearing. And indeed but few perſons in the Family eſcaped being affected, more or leſs, with this moſt contagious peſtilential Fever. But they who were moſt affected had the glands of the bowels and other parts braced up, and the foul humours confined by the uſe of the Bark. Whereas a fat, groſs Woman, a Servant, in whom a Diarrhæa came on, eſcaped all the bad ſymptoms that others had, and not only ſoon, but effectually recovered.

‖ Not only human bodies were affected, but Horſes alſo about this time had bad colds, and fevers attended with the ſtaggers. Nor did even Dogs eſcape being taken with very peculiar Diſorderss as in a former ſeaſon; and there were more numerous inſtances than uſual of canine madneſs.

‡ An elderly man had now a violent attack of this Diſorder, to which he was ſubject, but he recovered; a young Man however died in a violent caſe of it in the Spring.

* Complaints of this ſort were ſo common now, that two Gentlemen who had been at Cheltenham, were affected with them: one of them being attacked, upon his return, with pain and obſtruction in his bowels, which with proper aſſiſtance ſoon went off; and the other with pain in the Stomach; the matter however occaſioning the Diſorder, was ſoon thrown out thence into the limbs, and preſently diſperſed and carried off.—

of the temperature of the Air in the latter end of it cauſed intermittent Fevers to become almoſt continual ones; and attended with delirium†, large hæmorrhages§, and other violent ſymptoms; the change into the latter being ſometimes abſolutely perfect. Many were ill and died of burning Fevers‡ about this time, and in the beginning of Autumn*, eſpecially in cloſe places. They were now frequently attended with Diarrhæas: whereby Perſons affected were greatly weakened, and much reduced before they recovered. But in caſes wherein the Dyſentery came on it was much worſe with them, and they were in more danger‖. In many of them, eſpecially Perſons of ſtrong habits there

Another Perſon, who did not go there laſt ſeaſon, was affected, at times in the Winter, with pains both in the bowels and limbs. In the former inſtances we find, that though the morbid humours were attenuated, in ſome meaſure, by the Cheltenham Water, they were ſtill of ſo tenacious a nature, as to be incapable of ſpeedy ſeperation, even by the glands of the bowels; the difficulties that attended perhaps ariſing from not perſiſting long enough in the uſe of it. But we ſee plainly enough that, from ſome cauſe or other, they were in a worſe ſtate, and ſtill more unfit for diſcharge in the laſt. Which cannot well be attributed to any thing but the want of the uſe of this powerful water the preceeding ſeaſon.

† Two Perſons died unexpectedly in theſe Diſorders; and another, in an intermittent, or rather remittent tertian, had violent and long paroxyſms with delirium.

§ A young Woman, on the coming on of one of them vomited up a large quantity of blood, having violent pain in the head; and another, after having had, for ſome time, a violent pain there, was ſubject after it to ſuch a contraction of the muſcles of the eyes, as to give an oblique caſt to them for ſome time.

‡ An old Gentlewoman, who had one of theſe, in a lingering manner, three years ago, was now taken with a violent one accompanied with delirium, and died of it.

* At this time a young Woman had a large hæmorrhage from the lungs in a Fever, for which ſhe, improperly enough, took Bark and other aſtringents; in conſequence there was no criſis. She had after it a cough, and alſo a Diarrhæa; which latter was imprudently reſtrained. She died in two years of a conſumption.

‖ A Man above the middle age on the 21ſt of Auguſt had a fit of a tertian Ague, and went out and worked hard in the fields, in hot weather, in the intermiſſion of next day; the conſequence of which was a violent return of it, on that ſucceeding. And though ſuch relief was had from vomiting, the

there was a full, loaded and oppreſſed pulſe, tending to ſome degree of hardneſs. And yet they complained of exceſſive weakneſs and faintneſs in the very beginning of them, ſome dying in 24 hours after the attack. They had alſo violent pain in the head, and were, as they expreſſed it, *puthered* to death: undoubtedly from the great quantities of hot, groſs, impure vapours riſing in them, from the morbid peſtilential humours, not regularly diſcharged. Nothing ſeemed to do them good. If they were purged however in the beginning they ſooner recovered, or if a Diarrhœa came on at any time of the Diſorder§. But if an intermiſſion came on the Bark would not do§. Intermittents alſo were very epidemical: but out of a dozen caſes, that medicine would not agree in one, be the intermiſſion ever ſo perfect*.

In the latter end of Autumn theſe burning Fevers were much attended with ſore throats. But above all there was

the uſe of aperients, and conſiderable ſweats after the paroxyſms, that he ſeemed to be getting better, yet he was unexpectedly attacked on the 28th inſtead of the 20th, the uſual day of return, with a continual Fever attended with Coma, dyſentery, and extreme weakneſs, there having been nothing critical in any of the preceeding diſcharges. After bliſters had been applied, infracted doſes of Ipecacuanha given, and other methods uſed, being in a few days in ſo reduced a ſtate, by the profuſe diſcharges from his bowels, that he was not likely to live, it was thought adviſeable to ſupport him by a light preparation of the Bark. This luckily purged him inſtead of confining his bowels. And though he ſeemed worſe, in ſome reſpects next day he afterwards gained ground, and by the 8th of September was pretty well recovered. However when he got abroad he was ſubject to an aſthmatic Diſorder for ſome time. And this is the only caſe, under my inſpection, wherein the Bark given ſo early in a continual Fever, or indeed any other, ſeemed to agree tolerably. Even this not happening till after having large diſcharges from the bowels in a dyſentery, and being reduced thereby almoſt to a dying ſtate.

§ Diſcharges by the bowels, and thoſe very profuſe ones too, by the uſe of medicines, were found to be eminently uſeful in the firſt ſtage of the peſtilential Fever at Philadelphia in America laſt year. See what I have ſaid on the great uſe of aperients in burning Fevers, in my Treatiſe on the Peſtilential Conſtitution of 1778.

* A Perſon who had the Ague laſt year, upon taking and repeating the Bark, had ſeveral returns of it; nor did he get well till he had a Diarrhœa, and alſo an impoſtumation below the ear.

a re-

a remarkable tendency of the morbid matter to the bowels, as there had been through the whole year, as hath been already noted. Producing inflammations and obſtructions in them, large hæmorrhages from the ſtomach†, and other violent Diſorders: undoubtedly owing to the compaction, confinement, internal direction and impulſe, as well as ſtagnation and rarefaction of tenacious and impure humours, which could have no proper diſcharge from the ſurface of the body, nor due ſecretion by the other glands.

About this time, and in the beginning of Winter, Feveriſh Diſorders, that ſeemed to be wholly gone, were apt to return. Relapſes were alſo common in the preſent burning Fevers, and complaints connected with them. Many were alſo much affected in the ſtomach and bowels, as in the preceeding ſeaſons; the morbid humours having ſtill a pe-

† A young married Woman, of but an indifferent habit, who had an Ague in the Summer, that probably went off without criſis, was now attacked with a burning Fever and violent Vomiting with a profuſe diſcharge of blood from the ſtomach. On the decline of the year ſhe had felt her ſtomach gradually ſwelling and increaſing in ſize before the veſſels burſt, and the diſcharge came on. Which was much larger than that from the lungs, coming on alſo on the attack of a Fever, above recited, or that which, under like circumſtances, came from the ſtomach of another perſon ſome time ago. The heat internally was ſo great, that ſhe had a very frequent call for cold water, and could take nothing but that and fruits Notwithſtanding the violence of the hæmorrhage, when it ſtopped, ſhe had a cloſe hard pulſe, and a very coſtive ſtate of the bowels, as was generally the caſe now in theſe Fevers. However by repeating gentle glyſters, for ſhe could not retain any Medicine taken by the mouth, ſhe was ſomewhat relieved, and her pulſe grew rather ſotter. But ſhe was ſtill very ſick and vomited up every thing; having a very dry, foul, and brown tongue, and ſtill alſo great internal heat: and after a few days the vomiting of blood returned for a day or two, when the Fever roſe in the paroxyſm, by which ſhe was much reduced, other ſymptoms remaining nearly the ſame. However by the beginning of Winter her Fever abated, but not before; and in conſequence of a more due attenuation of the humours, her bowels became more open, which greatly relieved her, but ſhe did not recover her ſtrength till next year, when the weather grew warmer, and gave aſſiſtance to her conſtitution.—It is to be noted that ſhe was of a foul habit, as I have hinted above; which made her ſubject before this, to a violent attack, of the ſcarlet Fever and ſore Throat, in 1778: from which and its conſequences ſhe had never well recovered when ſhe was taken with this burning Fever.—She had a ſcorbutic eruption on the ſkin in the Summer after this illneſs, and pain, and ſwelling in the face, noſe, and gums, with an impoſtumation in the latter.

culiar

culiar tendency thither‖, and particularly to the liver, as they had laſt year to the lungs, in order to paſs off by expectoration. In fact there has been a great increaſe in the violence of acute Diſorders, and the obſtinacy of thoſe of the chronic kind, for ſeveral years: the former having been very remarkable indeed, but in nothing more peculiar than in reſpect of relapſes, as was the caſe alſo in many of thoſe burning Fevers taken notice of by Hippocrates in Statu Peſtilenti.

About

‖ A Gentleman between 30 and 40 years of age, by his profeſſion much expoſed to the injuries of the weather, and the ill effects of getting up in the night, and who about 13 years ago, under the putrid conſtitution, had had a very bad Fever treated injudiciouſly with bark in its beginning, and in conſequence defective of due criſis in its termination, and from which he with great difficulty recovered, was attacked this Autumn with a burning Fever, with a tendency of the morbid matter by reaſon of its tenacity, to his bowels, as was the caſe alſo in the putrid one, but by which they were now much more oppreſſed and obſtructed than in that, the liver alſo appearing to partake of the general Diſorder in them. On this account he took 5 grains of Calomel on its coming on: in the courſe of it being affected with violent ſpaſms, not only in the bowels but other parts of the body; and by reaſon of the inſuperable tenacity, as I have ſaid, and inſeperable nature of the diſeaſed humours, in great danger of falling into a Tetanus; which if they had not had ſome partial diſcharge by a flux from the bowels that came on, would moſt probably have been the caſe. After taking the Calomel, round mercury with aperients, and the uſe of Clyſters, the complaints in the bowels ſeemed to be much relieved. However by two relapſes that he had, through coming down ſtairs into the air, and the uſe of groſs food before the Diſorder was gone off, and eſpecially by the laſt return of it, he was ſo much reduced by the end of that ſeaſon, that it appeared neceſſary for the bark to be adminiſtered. The medicine, happily enough, did not quite lock up his bowels, but brought on a return of ſuch violent ſpaſms and contractions in them, that a pipe could ſcarce be introduced by the rectum when Glyſters were uſed; he being on account of obſtructions that ſtill remained in them, under a kind of dire neceſſity, under theſe circumſtances, of repeating Calomel,

About the middle of Winter ſudden deaths were common, not only among old People, but alſo the young and

mel. By this he was much irritated, and oppreſſed by the bark: ſo that in the end of Autumn, he was in ſo weak a ſtate that he could take no medicine at all. The laſt he took, improperly enough with intention to take off the flux and effort by the bowels, was the wax medicine: for the diſcharge from them, though ſmall, ſtill continued, and was the chief thing likely to ſave him. When medicine could be again adminiſtered, he took a little bark on account of great weaknefs: the tenacious humours however were ſo confined by it, that a teneſmus came came on again, with violent ſtrainings ſo as to diſcharge blood. —In caſes that require time for a cure, oppreſſing the body with groſs food in their beginning, thus producing relapſes, and rendering the repetition of mercurials neceſſary; which upon a ſecond uſe in the preſent Diſorders, greatly irritate and weaken, is the ſureſt way to bring on a premature call for the bark, and before it will agree, and thus make a caſe end in fatal conſequences. However though this Patient was ſo much weakened by the frequent repetition of the above mentioned irritating medicines, and by relapſes brought on by ſuch oppreſſive food, and to add to the miſchief, the morbid matter, as far as nature could ſuffer it, confined, and her efforts reſiſted in regard of the only diſcharge that under her diſtreſſed circumſtances, could help her, namely, that by the bowels, yet, wonderful to tell, after all, that ſtill continuing, through great ſtrength of conſtitution he weathered out this lingering and dreadful caſe. Not however without being, on his recovery, ſubject to an obſtructed ſtate of the bowels for ſome time, to ſcabby eruptions on the face, and the falling of the morbid matter into one leg: which gave great pain and formed a tumor there, attended with a caries of the bone; ſo inveterate was the peſtilential matter that fixed on it.

Another Man about the ſame age, or rather younger, ill at the ſame time alſo of a burning Fever, was ſo much reduced by a ſtrong purging medicine taken in the beginning of the Diſorder, that, though he had afterwards a tendency of the morbid matter to one thigh, by way of impoſtumation, and alſo ſwelling of, and eruptions on the legs, being of a very ſcorbutic habit, yet the former receded, and the latter proved ineffectual, and he died in a few days. Verifying thus my obſervations on the impropriety of reducing Patients too much in the beginning of theſe Diſorders.

middle

middle aged. Some of them happened in the very beginning of Fevers, others not: but both were undoubtedly owing to exceſs of oppreſſion with foul humours and putrefaction. For bad burning Fevers began again, if they may be ſaid ever to have ceaſed, in the very riſe of the year, attended with violent delirium, great oppreſſion, and ſometimes difficulty of breathing, and high putridity§.

Among theſe there were ſome bad puerperary caſes, and alſo ſome with Rheumatiſm: the latter being, as well as thoſe without ſuch external pains, accompanied with delirium; and as to the nature of the burning Fever, in other reſpects, of the ſame ſpecific kind. Some violent caſes of them received benefit from bleeding, as other kinds had by hæmorrhages, as noted above. There were alſo ſome very irregular Agues‡.

Parturient Women were this year remarkably ſubject to the Piles, and to violent floodings after parturition; though ſome by good management eſcaped. Caſes of inſanity and cancerous Diſorders were alſo more numerous than uſual; the latter even affecting ſeveral young Perſons*.

§ A middle aged Woman who had a Fever in the Summer, without a due diſcharge of it, died now of a return of that Diſorder, although ſhe had a ſettling urine; this being the third Fever ſhe had had within a year or two.

‡ A Man ſome time ago had a ſeptimanal Ague, or one that returned only once a week. Which now, in the cold weather of Winter, changed into a quotidian and tertian alternately; having it two days together and then miſſing it the third.

* The peſtilential State of the air, which in this and ſeveral preceeding years, appears to have, more or leſs, affected all Europe, was ſo violent this year in the eaſt, that the Plague not only raged at Conſtantinople, but alſo ſo at Tunis on the coaſt of Barbary, that 300 perſons were ſaid to die daily in the latter.

# CHAPTER IX.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1786.

THE beginning of Spring, as in the two preceeding years, was uncommonly ſevere, with ſharp winterly froſts, and cutting winds out of the north and eaſt, and falls of ſnow. But with theſe, there were alſo, at times, tempeſtuous winds out of the ſouth and weſt, with rain, raw and variable weather, with a foul atmoſphere. There was likewiſe, notwithſtanding the extreme ſeverity of this ſeaſon, lightning even with the ſnow at this time of the year, and before the middle of it, an uncommon heat one day in the Air, obſervable immediately on coming out of doors, and ſometimes gentle rains out of the ſouthern points, with a miſty Air. At others it was very cold and raw out of the north and eaſt, with a groſs foul one. There being, in fact, a confuſed mixture of the elements, and, eſpecially at times, a ſort of combined and united power of them all; with a predominance however of a cold and raw Air to the middle of this ſeaſon. After this however it was uncommonly warm and ſeverely cold by turns, with rain or ſnow, a foul raw Air, and often an obſcure ſky; and in the latter end of it, alſo ſtormy with thunder, and large quantities of rain. And though the beginning of Summer was fine, clear, and hot; being once ſo much ſo as to raiſe the Thermometer up to 79; yet all this hot weather was attended with a cool northern Air. And it was followed by tempeſtuous winds with large quantities of rain, and a great change in the atmoſphere; the

the weather before the middle of it, being ſometimes remarkably cold for this part of the year; though at others conſiſting of a warm, moiſt, ſtagnating Air, tending at times, to the cloſe and ſultry with rain. And in the latter end of it, there were ſuch ſeverely cold, tempeſtuous winds, out of the north eaſt and north, as I never before knew as this time of the year. The weather being thus exceſſively cold, or warm, calm and cloſe, with a foul Air, and heavy thunder-ſtorms at times.

In the beginning of Autumn were heavy rains, and tempeſtuous weſtern and northern winds; one of the former being a perfect hurricane†, and moſt of the former part of this ſeaſon remarkably tempeſtuous. But in the middle of it there was ſome warm, calm, and fine weather for the time of the year; though not without the ſky being ſometimes overcaſt, the weather gloomy and Air foggy. This part of it conſiſting of returns of ſuch weather, after intervals of cold and raw or of tempeſtuous with rain: and the latter end of it chiefly of cold, raw, foggy, obſcure, gloomy, and moiſt weather, with ſtorms of ſleet and hail, and an uncommon ſeverity of Air. It being towards its concluſion, ſtill more moiſt, foul, and gloomy, with a ſtagnant ſtate of the Air, followed by heavy rains or falls of ſnow, and tempeſtuous hurricanes out of the ſouth weſt. Thus this ſeaſon of the year conſiſted on the whole, of tempeſtuous weather, with heavy rains or falls of ſnow, or of that

† To give ſome Ideas of the extraordinary intemperature of the Air, and diſturbed ſtate of the elements this year, I ſhall take notice of a much more remarkable hurricane, that happened, the laſt day of July, in Herefordſhire. It came out of the north weſt, and tore up trees almoſt inſtantly by the roots; and of one in Suffolk, attended with a thunderſtorm of a very peculiar kind, like a dark miſt reaching from the earth to the ſkies, and approaching with a great noiſe, like that of a fire roaring up a ſtove chimney; leaving a ſtrong ſulphureous ſmell behind it, that hung on the throat for ſome time: the wind breaking 7 trees in Weſley wood off in the body, and damaging an 100 more. There were alſo very terrible hailſtorms about this time.

which

which was raw, foul, and exceſſively ſevere, with an interval or two of ſome tolerably fine about the middle of it.

As to the Winter, the foul, moiſt, gloomy, cold, raw, and inclement weather of the latter end of Autumn, went on and increaſed in it; and alſo the tempeſtuous winds with larger quantities of rain: theſe being ſucceeded by ſome very ſevere froſty weather, for ſome days, and this by a mixture of bad. It being in particular very moiſt, foul, foggy, with ſharp hoar froſts, and cold and raw, with a ſtagnant Air, and obſcure ſky, about the middle of this ſeaſon, with now and then a fine day. And this was alſo the ſtate of the atmoſphere towards the end of it, with the addition of falls of rain and ſnow at times, and tempeſtuous winds again out of the ſouth weſt: to which and to the ſouth, though there was bad weather out of all points, they were more than uſually addicted in the preſent year. This part of it however concluded with a contrary ſtate; there being then ſome fine, calm, open, and remarkably warm weather.

From a due conſideration of the above deſcription of the ſtate of the atmoſphere—of the ſeverity of the Spring ſo favourable to Agues, and of the moiſt, foggy, hot, ſtagnant, and variable ſtate of the Air, both to them and burning Fevers, which had been before brought in, and were now eſtabliſhed by intemperature of various kinds, foulneſs and irregularity of ſeaſons, and by the great power the force of tempeſtuous winds has of increaſing the influence of bad Air upon the body, and the peculiar ill effects of thoſe out of the ſouthern points, we are not to wonder that both began early in the Spring, to be very epidemical, and of very bad kinds‖. Burning Fevers were attended with uncommon

‖ At this time a Woman of a Scorbutic habit, in whom the menſes were deficient, was attacked with a burning remittent Fever, attended with a large diſcharge of blood from the kidneys, and alſo one of foul humours from the bowels. Both were highly putrid and offenſive, having alſo ſo great tenacity, that they

mon dejection of ſpirits§; and in them ſuch extraordinary diſcolorations appeared in the legs and other parts, on the very attack of the Diſorder, as ſeemed to threaten a gangrene‡; and they were very uncritical. The ſame livid diſcolorations appeared alſo in lingering caſes of Fevers of a flower kind; which ſometimes were ſo obſtinate as to hang on 5 or 6 months. For each ſort was a Fever of a truly burning kind, manifeſtly attended with the ſame characteriſtic ſymptoms, and eſſentially different in nothing but the degree of violence. And even the moſt acute caſes in general, were by no means equal in that reſpect, to thoſe of the Greeks: a diſtinction evidently owing to difference of climate. But there was not one *Typhus*, that I know of, properly ſo called. Nor though there were many fluxes of morbid matter to the liver, for diſcharge, and oppreſſion, and thence inflammation ariſing in it, on the attack of Fevers, was there one *hepatitis*, under my obſervation, without a burning Fever original in the caſe. Nay I ſhall even go farther. For there were intermittents, or rather remittents of a peculiar kind, for the Fever, as is common enough in their beginnings, was never off, that were attended with the ſame great languor and dejection of ſpi-

they would hardly ſeparate from the veſſels in which they were received, and ſhe found herſelf relieved from their diſcharge. Vitriolic acids, as is uſual in ſuch caſes, were given, which diſagreed with her, and, as might be expected, locked up her bowels. However, after the Diſorder had hung on ſome time, ſhe was relieved, at length, by ſmall doſes of James's powder, and taking to her bed. For that medicine, under theſe circumſtances, acting by perſpiration, after ſhe had been ſubject to a dry ſkin, through the whole courſe of the Diſorder, carried off the Fever, and by attenuating and diſcharging thus the foul matter that occaſioned it, reſtored her to health.

§ They were ſo truly Peſtilential, and the morbid matter of ſo virulent a nature, that a man by one of them was not only made bald for life, but loſt his beard alſo.

‡ Fumigations with camphire were found uſeful in theſe caſes.

rits: having alſo frequently the ſame fatal iſſue*. In them there was an uncommon degree of nauſea and Diſorder at the ſtomach. And even Agues themſelves were ſometimes accompanied with profuſe diſcharges by the bowels as well as by the ſkin, and ſuch great internal heat, as to the ſenſation of perſons affected with them, ſeemed equal to that of fire; and ſuch an inextinguiſhable thirſt, that they thought they could drink a gallon of cold water at a draught†; being able to reliſh nothing elſe. Theſe alſo were in ſome peculiar inſtances fatal‡, and of the burning kind: having all of them the ſame characteriſtic heavineſs of the eyes, the ſame great internal heat, and being eſſentially different in little more than the degree of violence, type, and mode of action§; all to anſwer the ſame end, the diſcharge of tenaci-

* Two young Women died of them.

† See Thucydides's account of the Plague of Athens.

‡ An old Woman died in the ſecond fit.

§ Dwelling too much on names without underſtanding the nature of the Diſeaſes is often attended with male practice, and the worſt of conſequences.—Even Hippocrates himſelf was in an error in characterizing Diſeaſes by their ſymptoms, and retaining ſome of the diſtinctions in uſe before his time. For what is phrenitis? but a Fever with increaſed force, affecting the brain more powerfully than in a delirium: and which ſhould therefore be called a Fever with phrenitis: as one attended with delirium or comatoſe ſymptoms ſhould be a Fever with delirium or coma.—If the morbid matter be thrown upon the bowels, producing inflammation in the inteſtines, liver, &c. or other Diſorders in them, one with inflammation of the bowels, with hepatitis or inflammation of the liver, diarrhæa, or dyſentery. If the attack be upon the breaſt, a burning, putrid, or other Fever, with inflammation of the lungs or pleura. If on the limbs, one with inflammation and pain in them. For to call ſuch a Diſorder, an acute rheumatiſm is utterly wrong and untrue; ſince no febrile Diſorder ariſes, that does not follow after, or partake of the nature of the reigning Fever governed by the then exiſting conſtitution; which ought therefore, to prevent error, to be care-

tenacious, morbid matter, according to the power reſident in each habit, and as each was affected and diſpoſed, as is evident enough from this deſcription. Even a continual Fever in the ſtrongeſt having a daily time of relaxation; Quotidian intermittents no more; Tertians only one of longer continuance.

With the extraordinary diſcolorations and increaſe of violence and ſymptoms abovementioned, burning Fevers ſtill continued to be attended with rheumatic pains†, pleuretic and

carefully ſought after and diſcovered. And indeed to act otherwiſe is much below the dignity of Phyſic. For if a rheumatic Fever, as it is improperly called, riſes, or a violent Fever of any kind does not go well off, and by a good criſis, the Patient is often ſubject to relapſes, and the coming on of all the Diſorders, and ſymptoms above enumerated—to violent attacks on the brain, attended with phrenitis, delirium, or coma—to violent inflammatory obſtructions of the bowels, diarrhæas, and dyſenteries—and alſo, if the morbid and oppreſſive humours be thrown upon the breaſt, to moſt dangerous inflammations and oppreſſions there; each of them proving often fatal in the latter end of Fevers, as well as their beginnings.

† Theſe Diſorders ſometimes came on by accident, not however without a prediſpoſition to them.—A young Gentleman, 7 or 8 years old, who had been inoculated ſome years before, according to the Suttonian method, upon receiving a blow upon the hip joint by a fall, was attacked with a violent pain there, attended with a Fever, and ſo much diſcoloration of the part, that through fear of a mortification coming on, the bark was imprudently given. He recovered, but not without an impoſtumation being formed in or near the joint itſelf, and alſo boils on other parts of the body.—The bark which, as I have ſaid, was at firſt improperly given, was, under a notion of its alterative powers, or with a view of ſtopping the large diſcharge from the hip, as injudiciouſly continued, at leaſt at times, for near two years. From the uſe of which, however, long before this period, even the nervous fluid itſelf, by undue confinement and retention of the foul humours, was become ſo acrid and inſeparable by inſenſible perſpiration, that violent cramps came on,

and peripneumonic Diſorders, and inflammation of the bow-

for which he was obliged to take opiates. And the foul matter that exiſted in the habit, even before the accident, and was the grand radical cauſe of all the miſchief, was now ſo compacted together, become ſo tenacious, and endued with ſo acrid and highly peſtilential a nature, and ſo fixed in the body, that when freſh boils broke out, as was pretty often the caſe, if they were ſeated upon the bones, they were attended with an external caries and exfoliation.—Under theſe dreadful circumſtances, the diſcharge ſtill continuing, and the hip joint being greatly affected, and I believe out of place, he was on account of the contraction of the muſcles, and a falſe notion that the uſe of Bath waters, by pumping upon it, would contribute to heal the ſore, ſent thither, which highly diſagreed with him, and reduced him to a mere ſkeleton. So that after his return from bathing in the ſea, where he was afterwards ſent, he was obliged to be put upon a milk diet; which with the help of a vegetable, aperient, and temperate method, the uſe of emmolient applications, and indeed an abſolutely different mode of treatment in general, ſoon reduced him into a better condition; he gaining fleſh, and recovering a much better ſtate of health, though the relaxation and luxation of the joint, and contracted ſtate of the limb remained. He ſurvived thus, till the year 1793, when he at length, died in the Summer of a Fever.

Having thus related this remarkable peſtilential caſe, attended with a caries of the bones, that aroſe from accident, I will now give one more extraordinary that came on naturally, under the ſame peſtilential conſtitution. About 6 or 7 year ago, a Boy 6 years old, happening to heat himſelf very much, by motion in the ſun, in a very hot day, the hereditary ſcorbutic matter in him was thereby changed into ſo acrid, and even corroſive a ſtate, as to being on a chronic peſtilence equal to what happens in *Lues venerea*: it being attended with a caries of the bones, of the head, ſpine, and feet, and a conſumption that gradually deſtroyed him. A Man alſo, in the decline of life, ſubject to a chronic rheumatiſm, had withal a peculiar kind of ulcer in the throat imitative of ſuch as ariſe from venereal taints; though from the known good character both of him and his wife, for he was a married man, his exemplary prudence and ſobriety, it could not reaſonably be imputed to ſuch a cauſe, nor from any conſequences that attended it.

els*;

els*; there were alſo ſome inſtances of the ſcarlet Fever‖. Many likewiſe were affected with violent pains in the face and teeth: theſe and even perſons who had dropſical ſwellings in the body and legs, having ſenſations that the parts affected were enlarged to an enormous ſize, the oppreſſion and diſtention ariſing from the vitiated ſtate of the humours was ſo extraordinary. There were alſo ſome peculiar caſes of chronic rheumatiſm, attended with great inaction, and a kind of dormant ſtate of the tenacious matter§; and ſome remark-

* A young Woman between 20 and 30, after being attacked with a burning Fever with pleuriſy, which left a remarkable drowſineſs behind it, upon coming down ſtairs into the air, was ſeized about a month after, with an inflammation in the bowels that carried her off.—Here had evidently been no criſis after the former attack.

‖ A young Perſon after having the ſcarlet Fever, in which he took bark, had a deſcent of the peſtilential humours into one leg, to cure which, he was adviſed to lay it up and get into the air. Upon ſo doing, a black ſpot appeared upon the head, and another on the face; the Diſorder, inſtead of high rarefaction and violent motion, as at firſt, ending in peſtilential ſtagnation and putrefaction, almoſt equal to what happens in the plague itſelf. From which we are to learn, that there is no ſafety to be had in febrile Diſorders, till a criſis is obtained; nor even after apparent recovery, till the habit is at leaſt a little cleared by proper methods. And on this peculiar occaſion, let me recommend to the ſtudy of the Faculty in general, the following moſt remarkable words of Hippocrates, in the 2nd Book of his Epidemicks, which ought to be wrote in letters of gold. *Eorum quæ decernere nata ſunt, ſi quæ judicatoria non fiunt, difficilem ſolutionem, ſi quæ vero contraria ſignificant, malum indicant. Non ideo tantum quod recurrunt, verum etiam quod priſcam naturam exuunt, et in contraria vergunt, non ſecus ac ea mala quæ in contraria tranſeunt.*

§ A middle aged Man of a corpulent habit, was afflicted with a ſluggiſh Diſorder of the rheumatic kind in his bowels, thighs, and legs, for ſome months. And though all the active methods that could be thought of, to put the oppreſſive tenacious humours in motion and diſcharge them, were uſed, he was in great

remarkably ſudden deaths, ariſing from the ſame great diſpoſition of it to ſtagnation and putridity‡.

In the irregularly hot and cold weather in the beginning of Summer, ophthalmies became epidemical; and rheumatic Diſorders both chronic and acute*. And through it, Autumn, and Winter, the chincough prevailed in a very bad manner; hanging on long, and being ſometimes attended with ſpitting of blood; there were alſo ſeveral inſtances of the Dyſentery. And, in the latter end of this ſeaſon, inflammations of the bowels were common; and likewiſe

danger of a total ſtagnation taking place in the former, they were of ſo indolent and ſizy a nature.

‡ A Man in the decline of life, ſubject to the Gout, but which by too low a way of living, among other cauſes, had not appeared in any effort or fit for ſome time, was now taken with a burning Fever that ſoon proved fatal. And a middle aged Woman, who had broke her leg 12 days before, and was in a promiſing way for recovery, but had imprudently neglected to loſe ſome blood, to which ſhe had been adviſed, died ſuddenly and unexpectedly of an univerſal putrefaction of the whole maſs of blood, with gangrene of the limb, that without any pain, or undue conſtriction by bandage, came on, after this ſhort confinement only, and the want of uſual air and exerciſe.

* A married Lady of a ſcorbutic habit, after expoſing herſelf daily, for ſome time, too much to the inclemency of the weather, began to complain of a pain, in one foot: and afterwards was attacked with a more violent one in one leg, and a burning Fever; in the courſe of which the head became affected, ſhe grew delirious, and it proved fatal. But though there was a remarkable increaſe of Fever every night, as is the caſe, in general, in thoſe of the preſent kind, and ſuch other ſymptoms as are attendant on violent ones; yet as a contraction of the muſcles of one or both eyes, came on in the progreſs of the caſe, and when the head became affected, a matter taken notice of by Hippocrates, and by no means uncommon in the fatal terminations of Fevers, it was from hence taken for an Hydrocephalus, with no other ſymptom or appearance to juſtify ſuch an opinion, or warrant the adopting ſo ſtrange a notion.

fluxes

fluxes to, and from the liver, in pure bilious diſcharges with much wind. There were alſo many Jaundices in burning Fevers; and likewiſe chronic caſes of that kind, attended with a flow one, and great tenacity, acrimony, and impurity of humours, and great itchings on the ſkin,—I have ſaid already that the preſent peſtilential conſtitution was a general one. And as the intemperature of all kinds, with the Phœnomena attending, were extraordinary in various parts of Europe, ſo were the peſtilential Diſeaſes out of meaſure violent, malignant, and putrid, in ſome inſtances, even beyond any former example§.

In

§ About this time an account came, from an ingenious Surgeon at Florence, to his friend at Paris, of an extraordinary caſe that happened under his inſpection, which to moſt perſons will appear incredible.—An Eccleſiaſtick who had heated himſelf greatly in doing matters for his acquaintance at a Fair, was attacked next Evening, as he was alone in his chamber at his prayers. The people below hearing ſome noiſe, went up; and on entering the room, where he lay ſtretched on the floor, obſerved a kind of lambent flame upon him, which abated and went off as they approached. When the Surgeon viſited him, he complained of a ſenſation in the right arm, like what ariſes from the ſtroke of a Stick, and ſaid that a ball of fire had ſettled on his ſhirt; all of which was inſtantly reduced to aſhes, except the wriſt bands. An Handkerchief, which by his deſire, when he came in, was put between his ſhoulders, was not injured. His drawers likewiſe were untouched: but his Coat was conſumed, though not an hair of his head was affected. The next Morning the teguments were entirely detached from the fleſh of the right arm. Thoſe likewiſe of the ſhoulder and thigh were much injured: and a mortification had ſeized the arm. And the third viſit, all the reſt were in the ſame ſtate. He complained of violent thirſt, and was agitated with terrible convulſions; diſcharged upwards and downwards very putrid bilious matter; had a *burning Fever with delirium*, (this ingenious Gentleman's own expreſſion) and on the 4th day, after two hours ſleep a lethargy or coma, and expired. The Writer obſerves that he ſaw with aſtoniſhment and horror, worms iſſuing from every part of the body, and even crawling out of bed; that the putrefaction was ſo great, that the exhalations from his body conſi-

In the beginning of Autumn and afterwards, terrible burning Fevers, that were often fatal, raged in ſeveral places‖, attended with great langour; the oppreſſive vapour ariſing in the body gaining no diſcharge by the ſkin. Perſons affected with them were much relieved by the action and diſcharges

derably affected the circum-ambient air; and that the nails began to detach from the fingers. That there was no reaſon however to apprehend the effects of external fire; for the wick in the lamp was turned to an aſhy ſubſtance, and almoſt dry. He alſo takes notice that the Philoſopher Maffei had a notion, that a flaſh of fire might be kindled in the body which might inevitably occaſion its deſtruction: and that, if he had been now alive, this caſe would have confirmed him in it.—So much for this ingenious Gentleman's account and obſervations; which I have not the leaſt doubt are very true.

Every one who knows any thing of Phyſic muſt know that a moſt violent peſtilential fever may be brought on by the heat ariſing from exceſſive exerciſe. To what a degree only then it ſhall ariſe in a conſtitution of the air ſo uncommonly intemperate as the preſent; or with what effects, on peculiar occaſions, and under particular circumſtances, they ſhall be attended, is in the power, I am ſure, of no Phyſician or Philoſopher to determine. Things that have been and thoſe we have ſeen and are acquainted with, we are too apt to make the rule of thoſe that ſhall be, and the meaſure of truth: a ſubject incomprehenſible, and in many caſes infinitely beyond the reach of our weak faculties.—Hippocrates in his conciſe and expreſſive manner often calls a Fever πυρ, ignis. In the caſe before us we have an inſtance, not only of a violent burning Fever with all its virulent ſymptoms, but attended with ſuch a degree of heat, on its riſe, as even to raiſe an electric fire in the body; and with ſo great putrefaction, as to produce that dreadful diſeaſe, and corruptible ſtate of the body, occaſioning worms to be bred in it before death, of which Herod and Antiochus periſhed.

‖ At this time a Man near Cheltenham died of a violent *burning Fever with delirium*, and attended with ſuch heat and putrefaction as to ſeparate the nails. Another appears to have been ſaved in a good meaſure, in a caſe of this ſort, through an hurt in his leg he received before he was taken with it, which broke out again and diſcharged plentifully in the decline of the Diſorder.

About

charges attending pretty briſk vomits, and the perſpiration ſucceeding their uſe; and alſo by gentle aperients and bliſters. In many of them there were impoſtumations on their decline; theſe werealſo common where there was no Fever —In the middle of this ſeaſon the Influenza returned, and colds and coughs were epidemical, many of them hanging on long and proving conſumptive And in the latter end of it, there were ſome inſtances, as in the Spring, of ſudden death.

In the Winter, as in Autumn, there were bad burning Fevers; one of which I was informed was accompanied with phrenetic ſymptoms, as others were with inflammation of the bowels. The ſcarlet Fever†, a bad ſort of chincough, and the ſmall Pox raging every where, and particu-

About the ſame time the young Man ſubject to inflammations of the bowels, the preceeding part of whoſe caſe is related in my Treatiſe on Cheltenham Water, recovered alſo from a burning Fever, but took Bark in its decline too ſoon. In conſequence of which, next ſpring he became ſubject to an Ague, which hung on him ſome time. However following then the advice I gave him of letting it take its courſe, without any medical interference, this compleatly reſtored him to health, which he enjoyed for many years.—In fact the efforts that ſucceed the uſe of Cheltenham Water, in various ſeaſons and at different periods, may be violent in ſome inſtances, but are never raiſed in the conſtitution to any great degree, except when it is neceſſary to the ſaving the Patient; and, as I have obſerved, are almoſt always ſalutary, at leaſt under good management; which is more than can be ſaid of ſome other powerful mineral waters, of which I ſhall ſoon have occaſion to take further notice. And I hope by this time, its wonderfully active powers, which in ſome oppreſſed and peculiar habits require a conſiderable ſhare of judgment in the uſe of it to direct properly, though ſo ſafe in general, are fully believed in and confirmed.

† Under a falſe notion of mere putridity, inſtead of a right conception and due knowledge of the nature of peſtilence, Port Wine was uſed freely in theſe highly inflammatory Diſorders, and where the throat was affected, that fumigated with the vapour of it; happily enough in one caſe, an impoſtumation formed there and ſaved the Patient.

larly

larly in a neighbouring city; and the latter being ſaid to be frequently complicated in an extraordinary manner with the former, in its beginning, and flushings ſimilar to it appearing on the ſkin before the eruption of the ſmall Pox; and both of them being attendant on the increaſed peſtilential ſtate of the riſing year.--In London there was a peculiar kind of Influenza or remittent Fever, as in 1782, attended with defluxions on the lungs of 7 or 8 days continuance. The Dyſentery likewiſe appeared, and a general unhealthfulneſs every where prevailed.

The year 1786 was peculiarly fatal to parturient Women, through large floodings that came on immediately after delivery. Several Women alſo, in this and ſome preceeding years, were at their full time delivered of dead children. And though ſea bathing, a mode of treatment not equal to nor corrective of the cauſe, was uſed in ſeveral caſes to prevent this, I never heard it was attended with ſucceſs in more than one*.

Every Man endued with a proper degree of penetration, and capable of obſervation, muſt be ſenſible before this, that great intemperature of the Air, both in reſpect of heat and cold, irregularity of ſeaſons, a too calm, cloſe and dry, or greatly diſturbed ſtate of it, with vaſt falls of rain, ſnow, and hail, frequently at unſeaſonable times of the year, with a confuſed mixture of all kinds of bad weather, under a foul atmoſphere, and ſtate of it perpetually changing, with ſome peculiarities belonging to each year, were the cauſes of the riſe, continuance, and increaſe of the preſent peſtilential conſtitution.

* There was an inſtance of a ſcrophulous Diſorder that fell in to one ancle of a young Gentlewoman who had been inoculated, and came on after an hurt. And though by topical applications it was removed, and the conſtitution afterwards aſſiſted by the uſe of ſea water and bathing, yet from her unhealthful, pallid, and yellow look, it was but too plain that the Diſeaſe was by no means eradicated, by the diſcharge of the foul humours from the habit.

# CHAPTER X.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1787.

IN the beginning of Spring, and indeed in all the preceeding parts of the year, the wind was very much in the ſouth, or ſouthward, and often very high: large quantities of rain coming out of this point, and the weather, with ſome variations as uſual, being in general very warm for the time of the year. And what cold weather there was, on the coming on of this ſeaſon, came, in a peculiar manner, more out of the ſouthern than northern points; undoubtedly from an uncommonly cold, vapouriſh ſtate of the Air in thoſe quarters*. However there was ſome very cold, raw, froſty, and piercing, in the middle of it, with falls of ſnow, that yet did not lye, out of the eaſtern and northern; this being ſucceeded by ſome very warm and cloſe. Warm and cold weather thus going on alternately, and it being, after the middle of this ſeaſon, very intemperate in all reſpects, changeable and uncertain; and towards the end of it very tempeſtuous and ſtormy with much loud thunder, great power of heat, and cloſeneſs of the Air, and large quantities of rain; with a mixture, at times, of a foul, hazy Air out of the eaſt, and ſome intervals of a very cold

* The weather this year was very irregular abroad. For by accounts from Stockholm, the Winter there was ſo warm, that the Thermometer never ſunk lower, though in ſo cold a northern region, than 15 below null. While on the contrary, it was ſo cold at Conſtantinople, as to ſtop the plague for ſeveral days.

one

one out of other quarters; warmth and moiſture predominating however in the former part of this year, as cold and moiſture did in the laſt.

The Summer likewiſe was very variable; for though it began with hot weather, it ſoon grew exceeding cold. This ſeaſon conſiſting thus of very hot weather, with ſtorms and gentle ſhowers at times, and ſometimes a clearer, at others a foul air, or of exceeding cold, with ſtorms of rain, mixed with hail or ſnow§. The ſtate of the air going on thus hot or cold, with intervals of very tempeſtuous ſtorms, and large quantities of rain, to the middle of it; but being on the whole, uncommonly cold for the time of the year, though the former part of it had been warm*. After this it continued ſtormy with large quantities of rain, chiefly out of the ſouthern and weſtern points; ſucceeded by very warm, cloſe, and moiſt weather. There being in the latter end of it a ſtagnant ſtate of the air, followed by more ſtorms and falls of rain: the ſame very warm, cloſe, gloomy, foggy, and calm weather conſtantly recurring after it, with an obſcure ſky. But, notwithſtanding this great

§ The weather was very ſevere at this time, and there were dreadful hailſtorms in ſome parts of England and France. And it was ſo cold in Scotland as to freeze Ice near an inch thick.

* This Summer during a ſtorm at Birmingham, there was a clap of thunder that began with one ſingle report, like that of a cannon, ſo loud that it ſhook houſes at ten miles diſtance almoſt like an earthquake, and the windows of others at fifteen. It was preceeded by a flaſh of ſuch vivid lightning, that it ſhone with great brightneſs on the floor, and gave light even through the key holes of doors, though it happened at mid-day; the reflection being ſeen vibrating reflection on reflection ſeveral times. What is ſtill more— it, that is the latter, inſtantly electrified vaſt numbers of perſons; turning round ſome, and ſtriking down others in the ſtreets. And yet though the lightning itſelf fell on an houſe, and paſſed between two perſons who ſat at work, it took not away the life of a ſingle perſon. Though it gave ſeveral of thoſe who were electrified in the ſtreets, acute pains in the ſhoulders that laſted for ſeveral days.

warmth,

warmth, this ſeaſon, as I have already intimated, was as remarkable for cold as for heat and cloſeneſs; the former giving a check to it, though the Spring was ſo forward.

In the beginning of Autumn the weather was alſo very cold and gloomy: this being ſoon ſucceeded again by high winds, and large quantities of rain, that ſometimes in large ſtorms, poured down, as it were; at others deſcended in gentle ſhowers, with intervals of warm, calm, cloſe, and gloomy weather, as in the preceeding ſeaſons. And after this it ſtill continued thus, at times, warm and foggy; at others cold, and raw, and then tempeſtuous again with much rain out of the ſouth. This being followed again by the abovementioned tolerably warm, and by cold weather, at times, with a very moiſt, and unwholeſome atmoſphere, a ſtagnant and cloſe Air. And in the latter part of it, after ſome cold and raw weather out of the ſouth, vaſt quantities of rain continued to come from thence, and out of the weſt, with, or ſucceeded, as before, by tempeſtuous winds out of both. A cold and raw Air returning after this; and then one much more ſo out of the eaſt with ſharp froſts: the Air, at other times, being very raw and foul, with an obſcure ſky, more rain deſcending mixed with ſnow out of the weſt, and there being hoary froſts, with a foggy Air out of the ſouth; the latter end of this ſeaſon, and the beginning of next being very cold and ſevere.

As the weather had been remarkably moiſt and foul through the preceeding part of the year in general, ſo was it in the beginning of Winter, and indeed through it, beyond meaſure gloomy, moiſt, and raw, or cloſe, with a thick, foggy, and ſtagnant Air out of the ſouth, eaſt, and north, eſpecially the former. And vaſt quantities of rain came out of both that and the north, followed by very variable weather, and ſudden changes into theſe two oppoſite and other points. But being, excluſive of a few ſharp froſt on nights, and cold weather for a few days at firſt, on the whole unſeaſonably warm and cloſe for the time of the year. However before the middle of it, there was ſome very

very cold weather with cutting winds out of the north eaſt, and great falls of ſnow*, ſoon diſſolving, and followed by a very cold, raw, foul, damp, and ſtagnant ſtate of the Air, out of that and the ſouth, with hoar froſts, ſoon ſucceeded again by rain. In fact ſo unſeaſonable was the weather, in this naturally colder part of this ſeaſon, or middle of winter, that there was ſometimes an uncommon warmth and cloſeneſs of Air in it, and no cold weather of more than 2 or 3 days continuance even then. But it continuing, for the moſt part, foul, foggy, moiſt, and unnaturally warm, between the ſudden returns of cold and raw, with ſhowers at times, or rain mixed with hail, or falls of ſnow, out of the north eaſt, with a ſtill fouler ſtate of the atmoſphere, and tempeſtuous winds that attended this unfriendly ſtate of it. And the latter end of winter conſiſted chiefly of foul, foggy, warm weather, with gentle ſhowers out of the ſouth, and tempeſtuous weſtern winds with rain, or of cold, raw, and gloomy, out of the eaſt, with now and then a fine day. There being a return of froſty weather with ſome ſnow, and likewiſe immenſe quantities of rain, out of the ſouth again, before the end of it. Followed as uſual by the ſame gloomy, and foggy ſtate of it, ſtagnant Air, and warm or cold atmoſphere, that preſided through the whole. Indeed nothing appears to have been equal to the foul mixture of weather in it, during the preſent peſtilential conſtitution; not even that of the Winter of 1779, 1780, or 1781. And I have been more particular in deſcribing it, becauſe it was the concluſion of an year, that appeared to complicate and combine together Diſeaſes in an uncommon manner, in the former part of it; and was alſo the forerunner of a moſt extraordinary intemperature, conſiſting of ſuch an extreme power of heat, cold, and drought, as ſo increaſed the violence, and conſequent ſymptoms of burning Fevers, the ſucceeding year, as even to alter in ſome reſpects, their very nature, and bring in numerous inſtances of true Phrenitis.

I have already obſerved that the ſcarlet Fever and ſmall Pox raged in a neighbouring city, in the very beginning of

* About this time were vaſt falls of ſnow in many parts of England.

the

the year: appearing often to be complicated together in an extraordinary manner, in the beginning of the latter, and being very fatal. And this was alſo ſaid to be the caſe in the warm, foul weather, in the latter end of Winter, and beginning of Spring, with regard to an eruptive Fever and the ſmall Pox, in another; which, with the aid of burning Fevers, brought on a great mortality. The latter growing ſo bad in one Goal, that the Goaler and ſeveral perſons of the faculty who attended were infected with them. Burning Fevers were alſo ſo fatal in other places, that there were inſtances where 4 or 5 of a Family fell victims to it. Many caſes, as in thoſe deſcribed by Hippocrates, *in Stat. Peſt.* were attended with a comatoſe diſpoſition on or ſoon after the ſeizure†; while others were accompanied with a phrenetic delirium†. Children in theſe fevers had conſtantly a mourning kind of voice*; and one in particular, an inflammatory diſpoſition of the bowels, returning regularly with the paroxyſm of the Fever every night. And fluxes alſo by the bowels were epidemical with them‡.

† A parturient Woman, through a cold contracted by lying conſtantly in a low damp room for many months, had a ſtroke of a palſy towards the end of her pregnancy, and was, both before and after delivery, in a very reduced ſtate. Upon drying up her milk on this account, ſoon after ſhe was brought to bed, with the receſſion alſo of a tumor in one breaſt, either naturally or by repulſion, ſhe grew comatoſe: and though ſomewhat relieved by a bliſter on the head, gradually ſunk under the Diſorder, with this ſymptom attending her to the laſt. In fact, nothing, not even the loweſt ſtate of weakneſs, will warrant practice reſiſtent of natural appointments, and efforts. An old Man likewiſe, attacked with a ſuppreſſion of urine, was alſo comatoſe. Which ſymptom will be probably attributed by ſome to the ſuppreſſion merely; but in fact aroſe from ſizineſs of blood, and oppreſſion of the veſſels, the grand cauſe of the whole.

* A child was ſo afflicted and reduced by one of them as to have ſpaſms, and a tendency to an Opiſthotonos.

‡ One of theſe Diarrhæas came on in a quartan Ague, attended with a pain in the rectum and teneſmus, with very ſmall diſcharges from the bowels.

ſo

On the coming on of the cold, intemperate, and variable weather before, and after the middle of Spring, oppreſſions and inflammations of the lungs became epidemical, eſpecially among children, to whom they were very fatal§. And thoſe of the latter, who had the ſmall Pox naturally or by inoculation, ſometimes died of a concomitant Fever attended with pulmonic complaints in the former, or an attack of them, in the diſeaſe by inoculation, at the end of the Diſorder‖. The bowels were alſo greatly affected, not only with Diarrhœas as above-mentioned, but alſo with ſevere inflammations and great obſtructions, accompanied ſometimes with a ſuppreſſion of urine. And from the remarkable ſeverity of and changes in the Air, many had rheumatiſm at the ſtomach, and vomited up humours ſo acrid and ſharp, as to be almoſt corroſive. There were alſo other very peculiar Diſorders of the ſtomach, attended with a ſenſe of coldneſs, and even tendency, at the ſame time, to a ſudden univerſal ſtagnation.

Agues and intermittent Fevers, as uſual, were very epidemical in the cold weather both of the Spring and Summer; and ſeveral Children became ſubject to Dropſies both of the aſcites‖ and anaſarcous kind. There were likewiſe many inſtances of ſudden death, even among middle aged and younger Perſons.

In the Summer burning Fevers and the ſore throat were

§ This Diſorder was akin to the Influenza of 1782; and a kind of return of it, though after a different mode.

‖ A Child that was inoculated 3 years ago, had an humour that fell into its leg next Winter. However it was ſo far from being duly relieved by this effort of nature, that, from the quantity of groſs matter ſtill retained in the veſſels, and oppreſſing the conſtitution, it was now attacked with a Fever attended with great difficulty of breathing, and died. As did likewiſe another under the ſame circumſtances, that was inoculated at the ſame time, either during the Diſorder, or ſoon after apparent recovery from the ſmall Pox by this method.

In the Summer burning Fevers and the ſore Throat were very prevalent in a neighbouring Town§, and there was with us, a bad kind of ſmall Pox†.

In the beginning of Autumn burning Fevers were frequently attended with diſcolorations externally, and ſometimes gangrenes in the legs, &c‡. There were alſo ſome caſes of this ſort without Fevers as laſt year. In this ſeaſon and in Winter bad Diſeaſes of various kinds became very general; burning Fevers growing very fatal‖, and being often attended, as well as very bad eruptive ones imitative of the ſcarlet Fever, with terrible ſore Throats§§; a bad kind

§ A Man who heated himſelf by violent exerciſe died now of a burning Fever, brought on, and much increaſed by it, and accompanied with a pleuriſy ending in a gangrene.

† A Girl who had the purples in the beginning of the ſmall Pox, but who was then relieved from this putrefactive tendency at firſt, after loading herſelf by eating too much when the Diſorder was going off, was attacked with a ſecondary Fever, and violent rheumatic pains, a quick pulſe, and great debility: the Diſorder remitting daily, as all the preſent Fevers do, and being in all reſpects apparently of the ſame kind. Bliſtering, attenuants, and aperients; and at length a little Calomel cured her.

‡ An old Man died now of a burning Fever thus affected.—And a child attacked with one, attended in the beginning with convulſions, had great diſcolorations on one ſide of the body, but it recovered.

‖ Burning Fevers were ſaid to be very bad in the county of Suffolk, Suſſex, and in Buckingham, Worceſter, a town between that and Birmingham, and other places: and ſo fatal in the latter, that it was reported by a Gentleman of veracity, that hardly a perſon recovered: an uncommon inſtance of mortality, if no confining and hot methods were uſed.

§§ It was ſaid four perſons died in one houſe in Birmingham: and that the ſore Throat, where it attended theſe Fevers, became fatal ſometimes in two days. At this time Fevers were ſaid to be general through all Europe.

of ſmall Pox being epidemical with them. Breakings out however in the latter end of Fevers that were not of the eruptive kind, ſaved many: while others died for want of criſis, either in the Diſorder, or not long after*. At the ſame time many were ſubject to inflammations in the eyes and eyelids, and eruptions and foulneſſes on the ſkin. Pulmonary impoſtumes and conſumptions§ were alſo very common; the peſtilential matter beginning now to have an internal direction, and to form abſceſſes in the internal parts inſtead of the outward; a perſon having one in the ſtomach†. There were alſo as in the Spring, ſome inſtances of ſudden death.

In

* One of theſe burning Fevers without criſis left an aſthma behind it, that was ſuddenly fatal to a Woman in the decline of life inclined to grow fat. She had had an attack of the latter about a fortnight before, which was temporarily relieved by loſing ſome blood. The fatal return of it happened in the beginning of the night, in the cold weather in the latter end of Autumn.

§ A young Man 25 years of age, who had an intermittent in London, attended 7 days after the attack with complaints on the lungs, upon taking large doſes of bark after theſe came on, under a notion of curing the intermittent, was ſeized with a ſevere pain in one ſide. And in the courſe of a few weeks, the lungs grew ulcerated, and he was in a confirmed Tabes. A young Woman alſo, of a weakly and declining habit, under the ſame circumſtances at firſt, upon taking bark thus with a cough and complaints on the lungs upon her, and reſtraining alſo a flux by the bowels, which afterwards came on, ſoon became ulcerated in the lungs, and in the laſt ſtage of a Pthiſis —A Perſon alſo who had a Diabetes, which is but another kind of conſumption ariſing from the ſame ſcorbutic, tenacious and acrid impurity, upon its going off after the uſe of aſtringent medicines, died ſoon of Tabes pulmonalis.

† This caſe happened to a Gentlewoman in the firſt months of Pregnancy. She had not been able to keep any thing on her ſtomach ſome time, and was, at length, in ſo reduced a ſtate, that her life was deſpaired of. The caſe ended in an impoſtumation

In the terrible foul weather of Winter, burning Fevers, and the peſtilential ſore Throat, were epidemical every where: the former being attended with deafneſs, and highly infectious and putrid, and both of them very fatal‖. There were alſo ſaid to be inſtances of the ſpotted Fever; a Diſorder ſometimes attendant on the Plague itſelf, if we are to believe the bills of mortality. Many of the burning Fevers were attended with great oppreſſion on the liver and ſtomach, and a tenſive ſwelling in the region where they lye. And there frequently were large diſcharges of phlegm and bile, in the attack of Fevers, from the accumulation of foul humours in both, and the determination of more in the blood internally to thoſe viſcera for diſcharge. They were alſo often accompanied with the Jaundice.

mation in the ſtomach, which upon breaking ſaved her.—Thus the peſtilential matter, which in the earlier part of this peſtilential conſtitution, uſed generally to be propelled to the ſurface of the body, in eruptions on the ſkin, or diſcharges by external abſceſs, began now to attain ſo tenacious, inſeparable and untoward a nature, as to be incapable of being determined to the outward parts of the body. Fixing therefore internally, and the ſame proceſs going on there for its diſſolution and diſcharge, eſpecially in ſome weak and bad habits, that were leſs able to attenuate it enough for its propulſion outwards, as happens in external impoſtumations: and this was more particularly the caſe in the conſtitution of the enſuing year.

‖ Five or ſix perſons were ſaid to be buried out of one houſe at Stourbridge, and 3 died in one near us: and the mortality was reported to be ſo great at Birmingham that 100 were buried in a week.

# CHAPTER XI.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1788.

IN the beginng of Spring there was a return of cold, as intemperate and ſevere as in Winter; as hath been the caſe for ſome years paſt. And this part of it conſiſted chiefly of very ſharp froſts out of the northern and weſtern points, with ſome ſnow, ſleet, and hail, as uſual, or of cold, raw winds, and obſcure and gloomy weather, out of the ſouth and ſouth eaſt, and ſometimes ſettled rain; with ſome intervals of warmer, and now and then gentle ſhowers; this former part of, and indeed all this ſeaſon, being on the whole, rather dry than otherwiſe.—Before the middle of it§, there were tempeſtuous winds as uſual, out of the weſt and ſouth weſt, and very cold ones out of the north: the ſame ſevere weather going on, with intervals of ſome that was warm, cloſe, and gloomy, till after the middle of it. When, though there were often ſharp froſts on nights, and ſometimes ſtill cold weather in the day, heat increaſed to a conſiderable degree; high winds returning again, at times, with rains, and ſometimes gentle ſhowers, out of the weſtern points —In the latter end of this ſeaſon the intemperature, both in regard of heat and cold increaſed: it being ſometimes exceedingly hot, while at others

§ The weather before the middle of Spring was ſo hot at Bath, as to drive the company away to other mineral ſprings; and there was thunder with us before the middle of April. But though it was, at times, thus warm in England, both now and in the Winter, it was in Sweden, and Denmark, intenſely cold.

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ſo cold a wind with a foul, raw Air, blew out of the north eaſt, as occaſioned ſuch ſudden changes in the atmoſphere, that the Thermometer varied 29 degrees in the compaſs of a day. There were alſo high winds out of other points, with rain, and a very raw Air, out of the ſouth: and before the end of Spring, ſuch hot weather, as to raiſe the Thermometer up to 78, and 80, though an high wind blew out of the ſouth at the ſame time; the very wind itſelf being warm. Thus this ſeaſon conſiſted chiefly of cold and warm weather, in the firſt part of it, with a great predominence of the former; and of ſuch ſudden returns of great heat and cold, in the latter part of it, as to make the Thermometer vary, at the ſame time of the day, once 36 degrees; the weather after the great heat, being for ſome days, as remarkably cool.

This moſt remarkable change from hot to cold weather, happened about the beginning of Summer; when there were ſuch high, cold, drying winds out of the north eaſt, as I never knew before at this time of the year†. And indeed there were frequent returns of an uncommonly harſh Air through the whole of this ſeaſon, though it was, on the whole, ſo remarkably hot and ſultry*—The abovementioned cold weather was ſoon ſucceeded by ſome ſo intemperately hot, as to keep the Thermometer up at 79 even

† At Cheſter, and ſeveral other places in Cheſhire there was about this time, ſuch a ſtorm of hail, with ſtones of an enormous ſize, accompanied with ſuch dreadful thunder, as was hardly ever known in England Cattle, Poultry, and even ſmall Birds, were ſaid to be ſo terrified by it, that the former ran, and the fowls fled ſcreaming over the fields and yards, ſeveral dropping that were ſuppoſed to be killed by the lightning; and even the latter attempting to take refuge in the houſes, by daſhing themſelves againſt the windows, and breaking the panes. There never was ſo ſudden and great a change in the air, as at this time, in the northern counties. For after ſix days unuſual heat, and even a peſtilential one for the three latter, it became on a ſudden remarkably cool; and next morning the hills in Cumberland, Weſtmoreland, and Lancaſhire, were ſeen covered with ſnow in the beginning of June; the weather being as ſevere as in February.

* The weather in the beginning of June, before the cold came, was ſo hot on nights in London, as to be hardly tolerable: Farenheit's Thermometer being up at 80 in the evening, and on nights. And when the cold weather came, it ſunk on a ſudden to 44 as with us.

till ſix in the evening; and raiſe it next day to 80§, though the wind ſtill continued in the north eaſt.—In this former part of the Summer however there was ſome rain, and ſeveral thunderſtorms in the hot, ſultry weather†: but after theſe the wind generally recurred to the north eaſt. And beſides the ſevere cold out of that quarter, there were ſometimes ſuch ſharp, cutting winds out of the north weſt, as I never knew at this ſeaſon. But though both the Spring and Summer were on the whole, very dry, there were at times, as I have ſaid, gentle ſhowers, and ſometimes ſettled rain out of the ſouth weſt, with tempeſtuous winds afterwards, and an uncommonly cloſe, ſultry air, ſucceeded by ſome moiſt, cloſe, uncomfortable weather, and then the uſual return of the cold wind out of the north eaſt. In the latter end of this ſeaſon, the weather was ſo hot, that the Thermometer was up again at 79, even at 5 in the afternoon; the air being ſometimes clear, calm, and ſtagnant, at others very cold, raw, and gloomy, with a cold wind out of the north, though there was a cloſeneſs obſervable in it at the ſame time. And thus it went on, with foul weather at one time, and very warm and cloſe, even when there was a briſk wind out of the ſouth weſt, at others: this ſeaſon concluding with a great deal of ſettled rain, and many heavy thunderſtorms, and a mixture of cold and gloomy, and cloſe and ſultry weather.

The beginning of Autumn was exceeding warm, and ſometimes ſo cloſe that people could hardly bear it; the Thermometer riſing to 74, even at this time of the year. The wind being in the South, but the Air in general ſo calm, and ſuch a dead ſtagnation in it, that little or none was ſtirring for ſeveral days; and the weather, though at

§ In Hungary and the Bannat of Tameſwaer, the heat was ſaid to be exceſſive.

† Before the end of Summer there were amazing ſtorms of rain in London, Bath, and Canterbury: the latter being of ſo uncommon a kind, as to be like what is called a water-ſpout And there were ſuch hailſtorms, with large pieces of Ice, at Paris, as were never heard of; and great quantities of rain fell between Cheltenham and Windſor.

times

times gloomy and obſcure, with now and then a gentle ſhower, in a great meaſure in a ſettled ſtate for a fortnight. But then, after 2 or 3 days of a cooler ſtate of the Air out of the north, there was a good deal of rain out of the ſouth and ſouth-eaſt, and ſtorms from the north-weſt, ſucceeded by more gloomy weather out of the ſouth, a great deal more rain, and alſo tempeſtuous winds out of the weſt and north, with intervals of warm, and ſometimes a very cloſe, cloudy and gloomy ſtate of the Atmoſphere, and, at other times, a very cool one, with ſharp froſts on nights, before the middle of this ſeaſon.—About this time the old north-eaſt wind, which had reigned through the two former ſeaſons began to return, riſe and blow a very cold, raw air; the ſky being at other times overcaſt, the weather calm, and the wind ſtill in the ſame point, or the eaſt or north There were ſome intervals however of finer and warmer weather: but towards the end of Autumn, tempeſtuous winds with ſettled rain from the weſt, followed by gloomy, foggy, moiſt, and uncommonly warm weather from thence, and the north-weſt. It growing colder in the latter end of it, with ſharp froſts, and a ſevere Air from the north-eaſt, or a foggy foul one from the weſt, or a gloomy and moiſt one from the ſouth, with ſome intervals however of finer weather.

As to the Winter, it was extremely ſevere to the middle of it: the air being very cold and dry‡, and the wind moſtly in the north-eaſt, eſpecially in the beginning of it*. There were however alſo cutting winds, of the tempeſtuous kind, out of the eaſt and north; Farenheit's Thermometer being down at 8, and in another ſituation, 5 above null. And though the Air was in general ſo ſharp, it was often

‡ Notwithſtanding however the rain that fell at times in this violent and ſudden manner, there had been ſo great drought on the whole, this year, and in particular, ſo little rain in the Autumn, that at this time the fens in Lincolnſhire were almoſt dried up, and the ſprings and rivers very low with us.

* At this time the weather, by accounts received, was extremely ſevere in Denmark, the Bannat of Tameſwaer, and at Paris; and alſo remarkably tempeſtuous in the north of Europe.

withal very raw, gloomy, calm and ſtagnant, and uſually foul. There being foul fogs blown with the wind out of the ſouth, and hoary froſts, and ſometimes alſo tempeſtuous winds out of that quarter, and the ſouth-weſt. The weather was alſo ſo variable in the beginning of January, that it ſnowed, thawed, rained, and froze again, all in the ſpace of 12 hours, as in 1780. There was likewiſe, at times, ſome hail, and indeed a mixture of all kinds of bad weather; but the falls of ſnow were very great indeed‖. About the middle of this ſeaſon the wind turned into the ſouth, and ſouth weſt, grew tempeſtuous, and a thaw came on, ſucceeded by a great deal of rain; froſt and ſnow however returning, and ſometimes raw weather, ſoon followed again by rain. For there began now to be large quantities, and ſometimes of very heavy rain, as well as tempeſtuous winds out of the ſouth, ſouth weſt, and weſt, with intervals ſometimes of weather warm for the time of the year, at others raw, but in general very gloomy, foggy, moiſt, and damp.—The latter end of Winter was out of meaſure tempeſtuous, with ſtill greater quantities of rain out of the weſtern and ſouthern points, ſnow out of the north, eaſt, and north-eaſt, with intervals of very moiſt, damp weather, with a ſtagnant Air, and withal very warm for the ſeaſon; it being however, at other times, very cold, raw, gloomy, and froſty on nights, but always very foul.

I have been thus very particular in my deſcription of the conſtitution of this year, as I ſhall be in giving its moſt important effects, becauſe I wiſh to give others true ideas of ſome very extraordinary Diſorders brought on or increaſed, by the very peculiar ſtate of the atmoſphere in it, with other cauſes prediſpoſing, and the proper mode of treating them, if this can be done. And having taken upon me thus to write of the Truth in Phyſic, I heartily wiſh, for the well being of mankind in general, in reſpect of health, I may be more attended to upon this ſubject, than I have been in regard of matters of much greater importance. Let my deſcriptions

‖ At this time there were great falls of ſnow in Northamptonſhire, and immenſe ones ſaid to be abroad at Paris, Vienna, and other places.

and

and ſentiments, as they accord with truth, then ſpeak for me, and as they agree with experience, and all the Phœnomena in Phyſic.

Bad and ſometimes fatal ſore Throats, and defluxions of peſtilential matter upon the lungs, and complaints in them often ending in conſumptions, were epidemical in the Winter, Spring, and Summer‡; and alſo fluxes of impure, tenacious humours upon the liver, and ſtomach, both in and out of Fevers; and attended with diſcharges of viſcid bile and phlegm*. And with theſe affections of them, tumours appeared externally in the region where theſe viſcera lye, which ſubſided by degrees in thoſe who recovered. Some caſes however were of ſo fixed a nature, and attended with ſuch great inflammation, as to end in an impoſtumation in the former viſcus; as had been the caſe in the ſtomach, in the ſingular one of the pregnant Gentlewoman laſt year, already noticed. And this was one among ſeveral other peculiar effects of the increaſed peſtilential ſtate of this.

Burning Fevers, this Spring, and in the preceeding Winter, were accompanied with deafneſs. And the heat in the atmoſphere was at times ſo great, that ſeveral Children had eruptions and a fluſhing on the ſkin, or a ſpecies of ſcarlet Fever. While others were affected with great heat and eruptions on the face, no Fever attending.

In the Summer and Autumn, burning Fevers, often accompanied with the ſore throat of the preſent conſtitution,

‡ A ſpecies of Influenza of the peſtilential kind, akin to that of 1782, has almoſt conſtantly returned, in Spring and Autumn, ſince that time. And though it may ſeem extraordinary, yet even Fowls were now affected with it in an uncommon manner, as well as human bodies, having coughs, and many of them dying.

* Theſe Diſorders upon the liver and ſtomach in one caſe were of ſo fixed a nature, that after febrile efforts for ſome weeks without criſis, it proved chronical: the tone of both being ſo weakened by the impulſe, and continued flux of the morbid humours that way, that towards its fatal termination, vomitings of viſcid bile and phlegm often came on, attended with an univerſal waſting or conſumption of the body.

were

were very epidemical in Birmingham. And bad burning Fevers were ſaid alſo to rage in the cloſe, ill-ſituated parts of Briſtol. And about the middle of Summer, phrenitis began to appear in a violent manner in them. For the extreme ſeverity of cold, and the violent intemperance of heat and drought, with the ſudden changes in the atmoſphere, raiſed diſeaſes, not only in the former but the latter, to an high pitch of violence, according to that of Hippocrates. *Æſtatis temporibus plurimum oriuntur Febres ardentes et ſi aliis quoque: Æſtate tamen ſiccâ contrahuntur magis et incrudeſcunt. De Morb. Vulg. Lib. II:* as was particularly the caſe with regard to the breaking out of the ſcarlet Fever and ſore Throat, in 1778; and alſo the violent attacks upon the head in the preſent Fevers. The morbid humours having now a peculiar tendency to it, as they had before, and in many inſtances ſtill have, eſpecially in the beginning of burning Fevers, as I ſhall preſently relate and deſcribe, to the ſtomach and bowels.—Theſe were the ſecond and third remarkable effects of the violent peſtilential conſtitution of this year. They were alſo often attended with bad inflammations in the bowels; and the ſcarlet Fever and a bad kind of ſmall Pox were epidemical at the ſame time; and alſo a ſpecies of Influenza, as in the Spring† And ſome old Perſons were ſubject to a boil akin to thoſe of the peſtilential kind, attended with violent pain, and tending very ſlowly to maturation, and accompanied with a ſlow Fever that proved fatal*; which was a fourth peculiar effect

† This was alſo, by accounts received, the caſe at Edinburgh and other places.

* An old Woman of a ſtrong conſtitution, but 80 years of age, had one of theſe boils, ſituated on the outer part of one ſide of the lower jaw, and attended with ſuch intenſe pain for ſeveral weeks, while the matter was forming, and before its diſcharge, for ſhe would not have it opened, that ſhe could get no ſleep on nights. And when it did break, ſhe was gradually exhauſted and deſtroyed by a ſlow Fever that continued afterwards. The abceſs proving of that ſort that Hippocrates calls unſalutary or uncritical; by reaſon, no doubt, that it did not effectually relieve the habit of the tenacious and deadly humours that abounded in it. Here we have hereditary and acquired ſcorbutic matter, rendered ſo fizy and tenacious by age, and the long continued action of the veſſels upon it, joined with the powerful ill effects of a peſtilential atmoſphere, that the conſtitution was incapable of atten-

effect of this peſtilential conſtitution, not in the Summer only but through all the year‡. As to intermittents they were not very remarkable with us, and I ſhall not therefore take much notice of them‖.

In the hot weather in the latter end of Summer and beginning of Autumn, burning Fevers began to aſſume a ſtill more violent and malignant nature, and to fall with great power upon the head§. Bringing on frequently Phrenſies in

tenuating and ſeparating it from the ſounder humours, or diſſolving and diſcharging it perfectly, even by impoſtume, from the body. The caſe ending in ſtagnation, corruption and death, the natural tendency of ſuch high impurity of the juices, when joined with total inability in nature, from the weakneſs incident to old age, of preſerving due purity in the blood, preparing a ſupply of new and ſounder humours, carrying on the circulation with proper force, or keeping up life and motion longer.—Another old Woman exhauſted by a lingering illneſs and decline, attended with a ſlow Fever, had before ſhe died, a tumor in the groin, as hard as a ſtone, that never came to ſuppuration. And an old Gentleman of 90, died of what was called a carbuncle; but what I ſuppoſe was a kind of peſtilential boil, attended with high inflammation: for a carbuncle appears to me to be an highly inflammatory tumor in the ſkin with puſtules, or bliſters, and exulceration. See Hippocrates's deſcription in the beginning of the 2nd book of his Epidemicks. I have taken notice of two caſes of this peſtilential boil before, that happened during the preſent Conſtitution.

‡ An old Man of 70 died of a burning Fever, attended with a gangrenous Eryſipelas in the ſhoulder.

‖ A Girl had an Ague 2 or 3 years, in which the morbid matter was of ſo intractable and inſeparable a nature, that ſhe never could perſpire to any purpoſe, nor even throw up any groſs matter from the ſtomach, though ſhe often vomited, for a year. The Diſorder hanging in this ſtate thus long upon her, and at length terminating in dropſical ſwellings with gangrene in the legs.—Her Mother alſo had an ague, for the cure of which ſhe took a great deal of Bark without any good effect; the Diſorder conſtantly returning, and varying its ſhape into all forms, till it at laſt degenerated into a quartan. After being affected in this manner with it, in ſome ſhape or other, between 2 and 3 years, ſhe was cured by alkaline ſalt, ſteel, and Bark duly adminiſtered.

§ A young Woman about 20, whoſe caſe was neglected in the beginning, and no methods uſed early to diſcharge part of the accumulated morbid humours by the ſtomach and bowels, had now a burning Fever; which, as they were not in the leaſt diſpoſed to paſs off, after going on in a ſluggiſh manner for ſeveral days, at length roſe with great violence: the corrupt juices being by degrees ſo rarefied, and ebullition of them ſo great, that they fell upon and affected the head with ſuch intenſe heat, that, to uſe her own expreſ-

in them, as the conſtitutions of ſeveral preceeding years had brought on numerous inſtances of Inſanity without them; the bowels being often attacked in an extraordinary manner on the riſe of them.

Now if this, and the reaſon why violent and increaſed *Phrenitis* often comes on in ſuch caſes, namely from the rarefaction, by the great action and heat of the ſubſequent Fever, of a great part of the groſs, foul matter, that falling thus, in the firſt inſtance, on the bowels, for want of its evacuation, either by the efforts of nature or the help of medicine, where ſhe firſt pointed out the road, was afterwards tranſlated to the head—if, I ſay, theſe things were well attended to, it would lead Practitioners into the right method of treating them. For on the firſt attack of the bowels, in the very beginning of theſe burning Fevers§, nature plainly ſhewed that there was no time to be loſt; and that ſhe wanted immediate relief by emetics, and attenuating pointed mercurials, that act by the bowels, from a predominating load of tenacious impure humours then oppreſſing them, and thrown there by her efforts for the very purpoſe of their diſcharge. And when, from an accurate knowledge of the cauſes of Diſeaſes, and their future conſequences, and the violent ſymptoms and danger that muſt otherwiſe ariſe, due care was taken to relieve the conſtitution thus, in the firſt inſtance, of a great part of the quantity accumulated in, and then oppreſſing it, and to attenu-

expreſſion, ſhe ſaid ſhe could have borne to have a pail of cold water poured upon it. She however had no phrenitis, and was relieved chiefly by James's antimonial powder, taken in ſuch doſes as had a conſiderable effect by the bowels, and by the uſe of other aperients Bliſtering was very ſparingly uſed: nor durſt I venture on the application of one to the head, in a caſe wherein the brain was affected with ſuch great heat. By this prudent yet effectual management ſhe gradually recovered, though both her Mother and a Siſter died of theſe Fevers. But though ſufficient relief was thus had by the bowels, for the reſtoration of apparent health, none of thoſe particular diſcharges by the ſkin and kidneys, ariſing from the perfect attenuation of the tenacious humours, that one wiſhes to ſee in the latter end of caſes, came on: nor in another caſe from which another young Woman with great difficulty recovered, though ſhe had the beſt aſſiſtance given her.

§ In my Tract on the peſtilential Conſtitution of 1778, I have taken notice of the great uſe of aperients in burning Fevers.

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ate, in ſome meaſure, the reſt, and make it more fit for ſecretion, it is plain enough to a man of good knowledge in phyſic, and indeed to common ſenſe, that thus leſſened, the remainder, when put into greater motion on the increaſe of the Fever, and ſtill farther attenuated by the ſubſequent action of the veſſels, could not raiſe it to ſo high a pitch, nor make it riſe with ſuch violence in the head, and bring on ſuch extraordinary effects there, as muſt unavoidably happen, when the whole of the morbid matter was on a ſudden rarefied, attenuated, and ſet in motion by active methods, where no previous due relief had been had by thoſe glands, which alone were capable of ſtraining any of it off under its original groſs form; namely thoſe of the bowels: it being utterly incapable, by reaſon of its tenacious and peſtilential nature, of being ſoon diſcharged by the finer ſecretions from the body†.

Being aware then of the danger of the ſudden rarefaction of a load of ſuch matter, and attending to the indications of nature, and well knowing that giving a fair diſcharge to it by the bowels at firſt, at leaſt in all caſes where ſhe thus called out, as it were aloud for aſſiſtance there, was of the utmoſt conſequence, I never heſitated to give Calomel, not only in caſes where the bowels were obſtructed on the attack of burning Fevers, but alſo in others where a diarrhæa came on. And let it ever be remembered that true phyſic is not a form of preſcription, neither a mode of practice; is not to be ſupported by falſe theories, but conſiſts in the moſt accurate knowledge of the prime cauſes of Diſeaſes as they exiſt in the body, under the influence of the air and other circumſtances: the good practice of it depending on the deepeſt attention, the higheſt ſagacity, and the exerciſe of the moſt ſublime knowledge, and profound judgement, the human mind is capable of attaining in the preſent ſtate.

The ſore throat of the preſent conſtitution often attended burning Fevers, as I have obſerved, and ſometimes im-

† This was fully exemplified in numerous caſes of the Peſtilential Fever at Philadelphia in America, in 1793.

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poſtumated; but the Influenza with coughs, and Fevers with attacks of the bowels in the beginning were the moſt common Diſorders: and it was uſual in lingering caſes of all ſorts, as well thoſe which had not, as thoſe which had any preceeding pulmonic affection, to expectorate on the decline of them, the conſtitution not being able to get off the collected tenacious matter any other way‖.

But above all burning Fevers riſing often into phrenſies, were very prevalent this Autumn‡: the difference between theſe as well as ſome other Diſeaſes, and the conſtitutions producing them, and thoſe of the ſame kind ariſing under the peſtilential one deſcribed by Hippocrates, appearing chiefly to be, that in the latter the ſtroke was ſudden and great; bringing in numerous Diſorders in a moſt violent ſtate at once, and among them carbuncles, through the more powerful heat of the climate in Greece. Whereas the preſent, with the Fevers and other Diſorders, except the ſcarlet Fever and ſore throat, of 1778 and 79, which ſtood in the place of the carbuncles under his, has come on by degrees, and both gradually increaſed in violence, during a courſe of ſeveral years, till they at length roſe to the pre-

‖ See my obſervations on the burning Fevers of 1778.

‡ A Man about 40 years of age of a bloated habit, and not very temperate, was attacked, in the beginning of Autumn, in the bowels, on the riſe of a burning Fever. For which he very improperly took round inſtead of pointed mercury, with purgatives, and that too late in his Diſorder: having, before he called in medical aſſiſtance, very imprudently taken ſo hot a medicine as Tincture of Senna, thinking it to be the colic. In the courſe of it a dyſentery came on, for which he alſo improperly took opiates. For by the latter the inflammatory obſtructions certainly were not leſſened; and by all of them the heat, and conſequent ebullition, and putrefaction of the foul humours, undoubtedly were increaſed, and the caſe precipitated. It was not long before the head became conſiderably affected, but not violently while the flux continued. But in a few days, when this went off, whether by the uſe of opiates, or from any other cauſe, the Fever and rarefied morbid matter roſe ſuddenly with great violence into the brain, and brought on a raging madneſs: and to uſe an emphatical expreſſion of Hippocrates, regarding the like fatal termination of one of theſe caſes, *Phrenitide periit.*—It is here to be noted, that no care had been here taken to unload the body, nor to open the texture of the blood, and attenuate the tenacious humours, neither by the uſe of proper methods before, nor by that of Calomel on the attack of the Fever.

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ſent height†. Many of the burning Fevers being not only violent in their attack† and rapid in their progreſs§, but often alſo of a very lingering and obſtinate nature, as under the violent peſtilential conſtitution Hippocrates deſcribes. He gives us relations of ſome that laſted 80, 100, and even 120 days‖; but ſome of thoſe under the preſent were of much continuance; owing undoutedly, in a great meaſure, as far as natural cauſes in their ordinary progreſſion and effects are concerned, to difference of climate and ſituation.

Beſides Fevers with phrenſies, many were attended with a comatoſe diſpoſition, as in thoſe deſcribed by Hippocrates. Some of them alſo were of the kind that, after relief of a tranſient nature, without perfect criſis, returned again for the completion of them, or proved fatal for want of them, or paſſed into other Diſorders*, as ſome deſcribed by him under ſuch a conſtitution. And among other violent complaints in them, ſome had great fluxes of

‡ Burning Fevers were ſo mortal this year in the Workhouſe of a large neighbouring town, that a report prevailed that ſix dead bodies were depoſited in one grave.

† A Girl 6 years old was ſo affected in a convulſion fit, on the attack of one of theſe burning Fevers, that ſhe appeared to be dying.

§ An old Man complained in the evening he was not well, after which he was ſick at his ſtomach, went to bed, grew delirious, and ſoon after died; probably of an univerſal putrefaction of the blood.

‖ Hippocrates in Statu Peſtilenti, gives us a caſe of an obſtinate burning Fever ſubject to relapſes, in which, after ineffectual efforts, and many impure and imperfect diſcharges, a Man died without criſis, on the hundred and twentieth day: and a ſecond wherein another recovered with one, on the hundredth: but not without the help of a dyſentery at laſt, and the diſcharge of the impure matter mixed with blood, by his bowels.

One extraordinary caſe with phrenitis, after its firſt violence was over, hung on 4 months: but by the uſe of proper methods, and in particular that of a little Calomel, went off at length with an impoſtumation in the noſe on the coming on of warmer weather.

* A Perſon who had a burning Fever without criſis, had after it a double quotidian: another, upon going out too ſoon after the attack of a Fever, when he thought himſelf recovering, a Quartan.

of

of blood in theſe Fevers†: and others large evacuations of that ſort, or internal hæmorrhages, without them§. Things ariſing from the increaſed ill diſpoſition and more tenacious and corrupt nature of the foul humours, and their extraordinary confinement and rarefaction by hot and dry weather, the ill effects of ſevere winds out of the North-eaſt, and ſudden variations.

As to medical treatment—repeated vomits, even when Fevers were attended with the ſore throat, as was often the caſe, were found very uſeful. Patients alſo were much relieved by medicines operating even profuſely by the bowels, as well as by natural fluxes from them. But when they were affected with pain, oppreſſion and obſtruction, even though a diarrhæa came on, Calomel exhibited on the very riſe of them, as I have already obſerved, was the moſt efficacious medicine‖; checking the Diſorder in its very origin, and leſſening its conſequent effects, and preventing future danger, be the morbid humours in the courſe of it, diſpoſed to fall, and exert their force, where they would. All thoſe caſes ending happily, wherein it was thus early adminiſtred; and alſo thoſe, wherein, before the attack, proper mineral waters had been uſed. But there were both now and afterwards, many bad caſes differently circumſtanced or treated*, that proved very obſtinate and uncritical; perſons

† An old Man above 90, had a large diſcharge of blood in his urine in one of theſe burning Fevers: the caſe, as might reaſonably be expected, proved fatal.

§ A middle aged Man alſo had a vomiting of blood, that relieved him from a load accumulated in the veſſels of the ſtomach and bowels, in an oppreſſed habit tending to dropſy.

‖ Even ſo peſtilential a Diſeaſe as the ſmall Pox, after the due uſe of Calomel with purgatives, with temperance and a proper regimen, is ſeldom fatal even in the natural way.

* A young Woman apparently recovering from a Fever under the care of one Practitioner, was injudiciouſly enough adviſed by another to take Bark and Opiates, before any due critical diſcharge of the morbid matter had come on. The conſequence was that ſhe was attacked with a phrenſy: and upon the application of bliſters, with a gangreneof the parts where they were applied;

ſons with great difficulty, even with the moſt judicious aſſiſtance, being able to rub through them* And others had chronical terminations. But theſe difficulties were always increaſed, when health was attempted to be reſtored, in lingering caſes attended with great weakneſs, before the body, by the efforts of nature, or by the help of medicine, was put into a proper condition for it.

Many were ſubject to large diſcharges of bile and phlegm from the ſtomach and bowels, ſoon after the uſe of active purging waters. The tenacious humours being ſometimes ſo far attenuated as to have a free paſſage by the lat-

applied; ſo great was the tendency to ſtagnation and putrefaction, from the compaction and confinement of the before too tenacious foul humours. Under this dreadful exigency ſhe was relieved, and the motion of the blood kept up in the ſmaller veſſels, by the free uſe of Port Wine and ſtrong Beer, which under ſuch preſſing circumſtances were allowed. She would however even after this, probably with great difficulty have recovered, if ſhe had not received ſtill further and more effectual relief, by the exhibition of James's antimonial powder, and the attenuation and ſeparation of the morbid matter procured by it.---A phrenſy alſo came on, with other bad ſymptoms, by the injudicious uſe of Bark in another caſe; which were alſo relieved by the free uſe of Port wine. But theſe extraordinary means, properly enough uſed towards the latter end of caſes, to prevent immediate ſtagnation, cannot be uſed with judgment in other burning Fevers differently circumſtanced, eſpecially in their beginnings. Nor is the ſucceſs attending them a ſufficient warrant for the indiſcriminate uſe of hot methods: for an attempt of this kind would often be, and not long after actually was attended with fatal conſequences.

* A Woman about 30, who was improperly treated, her ſtrength impaired and body heated, by the uſe of wine in the beginning of one of theſe burning Fevers, was reduced in the courſe of a long caſe, to ſuch a ſtate of weakneſs, that it lengh put on the appearance of an hectic more than of a continual Fever. And though after the uſe of proper attenuants, an abſceſs formed on the lower part of one ſide of the face, yet, through the length of time the Diſorder hung on her, ſhe gradually ſunk under it. So dangerous often is the uſe of hot cordials, and ſo bad the conſequences of heating, and rendering ſtill more fizy, the tenacious humours; of diſſipating the finer juices; and inflaming and irritating the veſſels, and exhauſting the ſtrength by the uſe of them, eſpecially on the riſe of burning Fevers. Beginning thus, as a judicious Phyſician once expreſſed himſelf, regarding ſuch prepoſterous treatment in the firſt ſtages of the ſmall pox, where we ſhould end. For cordials thus improperly given, and prematurely uſed, have no proper powers, or good effects, in the latter end of caſes, when nature calls for the aſſiſtance of them.

ter‡; at others, from more imperfect preparation, a more difficult diſcharge§. And before the end of Autumn, Diarrhæas became very epidemical again: whereby many eſcaped Fevers, and others recovered health in a tolerable eaſy manner. An Influenza with coughs of a very bad kind†, and ſore Throats, attended with great putrefaction in the foul humours diſcharged, were alſo ſtill prevalent. And ſeveral perſons, at this time, had ſtrong tendencies to apoplexies, and palſies, as had been the caſe alſo the preceeding year‖.

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‡ A Gentleman, upon uſing pretty violent exerciſe, immediately after leaving Cheltenham, was attacked with one of theſe violent Diarrhæas, with great benefit to his health afterwards.

§ Another Gentleman had one that came on, in a fortnight after the uſe of that water, attended with an inceſſant vomiting for more than 12 hours, and moſt violent ſpaſms or cramps in the legs; ſuch extraordinary efforts did nature then uſe, in diſcharging a load of moſt putrid, tenacious phlegm, and other foul humours out of the habit; which had lodged long in it, and occaſioned a great and apparently dangerous decline of health for ſome time; and which would probably have brought on fatal conſequences, if they had not been prepared thus for diſcharge, ſet in motion, and carried off. And what was the conſequence? why a return of health. He did not however ſeem well-pleaſed with the mode of reſtoring it. But if people think to be relieved without efforts, they will often find themſelves deceived: it is what is not with reaſon to be expected; and what, under many circumſtances, cannot happen.

† A young Woman who had taken mercurials for a ſchirrhous ſwelling of the neck, commonly called a Bronchocele, and afterwards uſed ſea bathing; through the weakneſs brought on by the former, and repulſion of the ſcorbutic matter by the latter, was taken with a pulmonary hæmorrhage, and conſequent conſumption, that proved fatal.

‖ A Gentleman who laboured under conſtitutional Diſorders, and a bad ſtate of health increaſed by the bad influence of the preſent peſtilential atmoſphere upon intractable ſcorbutic humours, laſt Autumn drank Bath Waters. And, upon his return from thence, wrote a letter to a near relation, that he had received

In the cold weather in the beginning of Winter, Fevers were very bad indeed, infectious, and often mortal: ſome of them being attended with violent rheumatic pains, and very lingering and obſtinate§. There were alſo more impoſtumations in the liver in them. Coughs and oppreſſions of the lungs, and ſore Throats*, were likewiſe very epidem-

ceived great benefit from them, and was then in the very height of health, or ſomewhat to that effect. That very day or the next he died of an attack upon the head, without a ſingle ſalutary effort of nature to ſave him: So oppreſſed was the ſyſtem of the body with rarefied tenacious humous. Theſe ill effects are deſcribed in Page 71 of my Treatiſe on Cheltenham Water: and what are we to learn from them? Why, that while Perſons of foul ſcorbutic habits are at Bath, drinking thoſe Waters, they by their active power, attenuate and carry off ſome of the tenacious humours, keeping, at the ſame time, the glands of the ſkin and kidneys, for the preſent relief of the conſtitution, open for their diſcharge. But having no operation by the bowels, which ſuch habits greatly want, upon returning with their bodies not properly and effectually unloaded of the groſs matter that abounds in them, and with great quantities of foul humours circulating in their veſſels, and now, from the heat and action of the waters, in a rarefied ſtate, with the want now of the powers of them to keep up the due motion, circulation and ſecretion of the former, a ſuppreſſion of their diſcharge on a ſudden takes place, a diſtenſion of the veſſels ariſes, and an oppreſſion of the brain, from the riſing of predominant groſs vapours, comes on, and they are ſuddenly cut off. And theſe are objections that will ever lye againſt the uſe of theſe Waters, in ſome peculiar ſcorbutic caſes, eſpecially where that of Cheltenham is not uſed as a preparative. And that I have now ſpoken the truth in this matter, without prejudice or prepoſſeſſion, I hope will moſt manifeſtly appear.

§ A remarkable caſe of this kind now happened, of which the Perſon recovered; but not till after the formation of an abſceſs in the ear.

* A middle aged Man was now ſuddenly cut off by one of theſe ſore throats. A Gentlewoman however in a miliary, puerperary Fever, attended with one, after the diſcharge of about

epidemical, and ſometimes fatal. At this time there were dreadful Fevers in London fatal to many, and a very infectious one in Coventry, of which many among the poor died; moſt of them being delirious, and many phrenetical; and in this ſeaſon many old perſons dropped off †—†.

a gallon of phlegm out of the throat, as thick as whites of eggs, and the help of an impoſtumation there, with proper methods recovered.

† In the latter end of Winter a Man of a ſedentary life, and accuſtomed to the free uſe of Ale, had a ſtroke of a Palſy that proved fatal.

† The plague was of ſo bad and violent a nature, that, according to accounts received, even the ſevere cold of laſt Winter did not put a ſtop to it in Conſtantinople. And it was ſaid to continue all the Spring and Summer there; though not in ſo deſtructive a manner, as at Smyrna and the iſland of Scio. It was however ſaid to be very fatal among the Ruſſian Priſoners confined in the Bagnio, owing to the ignorance of their own Surgeons who inoculated for it; and alſo very fatal to the ſuite of the Indian Ambaſſador reſiding there; out of 300 Perſons leaving but 70. And it not only affected the lower claſs of people, whoſe habitations are ill ſituated, and who were badly accommodated, but ſome principal miniſters and officers were alſo ſaid to be laid up of complaints manifeſting ſtrong ſymptoms of it. It alſo broke out again at Algiers early in the Spring, raging there, and being alſo very deſtructive at Grand Cairo. Thus we ſee that the peſtilential conſtitution of this year as heretofore, reigned, in various degrees, through great part of Europe; affecting ſeveral countries and places according to difference of climate and ſituation. The Plague itſelf raging in Turkey, Barbary, and Egypt; and dreadful burning Fevers, and other violent and obſtinate Diſorders, in this Kingdom and many others.

CHAP.

# CHAPTER XII.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1789.

THE beginning of Spring was exceſſively ſevere. And though there was a great deal of rain and ſnow now, and alſo ſome of the former at times afterwards, yet this ſeaſon was peculiarly diſtinguiſhed, not only by its coldneſs, foulneſs, rawneſs, and harſhneſs, but alſo by its dryneſs, and the prevalent tendency of the air to ſtagnation and cloſeneſs, though there were, at times, tempeſtuous winds in it. And though about the middle of it, the weather was ſo warm as to raiſe Farenheit's Thermometer up to 74, this was ſoon followed by exceſſively cold, raw weather out of the north-weſt.

In the beginning of Summer alſo ſome days were as cold as in March; and the whole of it was remarkable for its uncommon coolneſs, and alſo its moiſtneſs, and the great quantities of rain that fell in it, chiefly out of the ſouthern points; for the foulneſs, and ſtagnant ſtate of the air in it, and the frequent changes of the wind into oppoſite points, and the great variation of the weather. And though, towards the latter end of it, it was, at times, very hot and cloſe, and more dry, yet there was at the ſame time, a cold wind out of the north-eaſt; theſe two oppoſites of heat and cold then reigning at once, but being ſoon followed by large quantities of rain, and rain with hail.

In the beginning of Autumn likewiſe, ſome very cold tempeſtuous winds blew out of the eaſt and north-eaſt, and alſo the weſt; after which there were immenſe quantities of rain, with ſome intervals of finer weather. And indeed, this ſeaſon was on the whole exceſſively wet and gloomy, with a very moiſt, foul, foggy, cloſe and ſtagnant ſtate of of the air, and an obſcure ſky However before the middle of it, there were ſome very cutting winds, and exceeding cold and even froſty weather, though wet on the whole, predominated in the form of rain or ſnow. The weather after this, towards the latter end of it growing more foul, foggy, obſcure and gloomy than the preceeding part of it, and the air ſtagnant, and cloſe.

As to the Winter, the weather in it was ſtill more foul, foggy, obſcure and gloomy, with a frequent dead ſtagnation of the air, though it was, at times, tempeſtuous as in the preceeding ſeaſons. It was alſo exceſſively wet and moiſt, and alſo very warm for the time of the year For this Winter was quite an open one, though the weather was very cold and raw at times, and now and then froſty on nights. Thus we ſee that the conſtitution of this year was remarkable for the exceſſive coldneſs and dryneſs of the Spring; the great coolneſs and moiſture of the Summer; the vaſt quantities of rain, and the very foul, foggy, moiſt, and ſtagnant ſtate of the air in Autumn; and the extreme impurity, moiſture, openneſs and warmth of Winter.

And agreeably to the very cold, foul, and raw ſtate of the air in Spring, the Influenza returned in it; and aſthma's were common among children and old Perſons*; there were alſo many conſumptions. Violent pains in the head and face were likewiſe very prevalent; in which ſome were almoſt inclined to grow delirious, even while they were able to walk about. And ſome actually had violent

* Even Dogs were affected with Fevers, inflammation and mortification of the lungs, and all the ſigns of internal corruption.

attacks

attacks on the brain in them, that were ſometimes fatal*; while others had Phrenſies†, and violent hæmorrhages§. The ſcarlet Fever and ſore Throat likewiſe appeared again in this ſeaſon; and there were many inſtances of ſudden death, even among young Perſons‡; a ſure ſign of the increaſe

* A young married Gentlewoman too much inclined to grow fat, after having the rheumatiſm in the head, had a violent attack upon the brain that proved fatal. She had been inoculated when young: both the eruption and maturation of the ſmall pox, being reſtrained, by the prepoſterous method of ſending patients out into the cold, at all times of the year, and the adminiſtration of the antiſceptics then in uſe. In conſequence of which ſhe had been ſubject to eruptions on, and even a ſwelling and enlargement of the face for ſome years paſt: ſhe had alſo lain in, in the Winter, and her milk was gone. I was informed this caſe was taken, as another I have related had been, I ſuppoſe on account of ſome diſtortion of the eyes in it, when the brain became affected, for an Hydrocephalus. See Caſe in page 134.

† A young Woman about 20 years old, of a delicate habit, who lay in this Spring, in Town, after repelling her milk within the month, on account, as was thought, of her not being able to ſuckle, had a violent ſudden attack of a phrenſy, in which ſhe drowned herſelf, by jumping into a pond of Water in the Garden. As was the caſe, and from a nearly allied cauſe, with many unfortunate perſons, who ran and jumped into the Thames, during the great plague in London; namely, the great internal heat and ebullition of the blood and humours in that Diſorder. See my obſervations in page 143, on the coming on of a Coma in another caſe, after repelling the milk for ſimilar reaſons.

§ An old Man of a very ſcorbutic habit, had now a violent hæmorrhage at the noſe, and after it an Elephantiaſis, and tendency to dropſy. And a middle aged one, alſo of a ſcorbutic habit, and from thence in a decline, died ſuddenly of a pulmonary hæmorrhage.

‡ A Man who uſed to drink large quantities of Ale, died ſuddenly in the night, in the very cold weather in the beginning of Spring; and likewiſe two other perſons; one of them an hear-

creaſe of the intemperate, or peſtilential ſtate. People were now much ſubject to foulneſſes on the ſkin, Boils and Impoſtumes‖.

In the exceſſively cold weather, in the beginning of Summer, there were alſo many ſudden deaths; and ſeveral fell into apoplexies*. Many were now attacked with burning Fevers accompained with rheumatic pains†: and they were ſometimes preceeded by convulſions in children, or attended with them. People were alſo much affected with chronic rheumatiſm, and the gout. Bad inflammations in the eyes likewiſe were now common; the foul humours falling on them both externally and internally: bringing on a fiſtula lachrymalis in one caſe, and a perfect Gutta ſerena ſuddenly in another. Fevers about the middle of this ſeaſon grew very bad: being attended with deliriums and Comas§,

ty but fat Woman, not more than 30; and the other a young Man, but of a bloated habit, who did not uſe proper exerciſe.

‖ A young Man had a large impoſtumation, with livid appearance and oedematous ſwelling in one thigh. This vaſt puſh of humours came on after a Fever attended with a diarrhæa, that I believe was reſtrained by the uſe of opiates. The enormous quantity of near a gallon of moſt putrid offenſive matter was diſcharged from it. He died in a few days; a ſlow Fever going on to the laſt, as in other uncritical impoſtumes already deſcribed.

* A Woman about 50, ſeized firſt with a paralyſis, died of an apoplexy the night after the ſeizure.

† A Woman had one of theſe Fevers, attended not only with violent pains, but alſo eruptions on both legs, from the violent force of the foul humours deſcending into or rather thrown upon them.

§ A violent caſe of this kind, in a Gentleman rather beyond the middle age, of a groſs habit, and uſed to live very freely, was relieved by an Eryſipelas in the leg, that ſuppurated and ſaved him, according to the obſervations of Hippocrates, in Stat. Peſt.

and

and ſometimes gangrenes in the limbs†; and often proving fatal*. And from the hot ſtate of the atmoſphere, accompanied with a cold northern wind towards the latter end of it, colds, and ſore throats were very epidemical; running through whole families, as well as Fevers without them.

But in the Autumn burning Fevers raged attended often with Phrenitis; and perſons who had them were more than ordinarily ſubject to relapſes or returns†; though that had been, in ſome meaſure, the caſe for a year or two paſt. They were of the kind therefore deſcribed by Hippocrates in Stat. Peſt. being often attended with Diarrhæas and at other times, inflammation of the bowels; and ſome dropped off very ſuddenly of the latter‡. Others had Pleuriſies,

† An old Man who had a burning Fever, with ſwelling and impoſtumation in one leg, died of a gangrene in it.

* A Man about 60, of a very ſcorbutic habit, ſubject to ſore eyes, and who, from the ſame cauſe, the tenacity of foul humours, had lately loſt his hearing, died now of a burning Fever attended with a ſuppreſſion of urine.

† A Perſon who was thought to be recovering from a burning Fever, died now of a relapſe attended with violent ſymptoms at laſt: and to uſe once more the expreſſion of Hippocrates, *Phrenitide periit.*—Let it here be obſerved, that this is the third bad caſe attended with violent attacks upon the brain, and phrenetic ſymptoms, that I have related, wherein no proper methods were uſed to attenuate the foul humours, and prepare them for ſeparation, nor to duly unload the body previous to the attack, that has proved mortal.—

A young Man through imprudently eating and drinking too much, and going out too ſoon into the cold after a Fever, had now alſo a relapſe that was very near proving fatal.

‡ Two Perſons died of theſe inflammations in the bowels. And a Gentleman who drank Cheltenham Water this Summer; after the appearance of ſcorbutic ſwellings in the legs, with a tendency in one of them to impoſtumation, which was imprudently

ſies, and Peripneumonies§. There were alſo ſome violent uterine hæmorrhages. And in the latter end of this ſeaſon, and beginning of Winter, the meaſles were epidemical, and very fatal, in cloſe large Towns, among children‖. The chincough was alſo prevalent in ſome places; bad

dently repelled, had now a return of inflammation and violent diſtention of the veſſels of the liver, to which he had been ſubject, but by proper aſſiſtance he ſoon got better. Another had a lingering Diſorder fixed on him in the decline of life, by the improper uſe of bark in its beginning. And a young Man, who, after imprudently drinking too much Cheltenham Water, in a ſcorbutic habit, ſweat plentifully on nights, its natural effect, and happened to hawk up ſome phlegm, ſtreaked with a little blood, was immediately concluded to be in a conſumption; and inſtead of loſing a little, taking ſome gentle aperients, and abſtaining from the uſe of the water a few days, packed off to Briſtol. Loſing thus all the good effects of it, in opening the cloſe texture of the blood, and ſcouring the conſtitution: though I have ſhewn in the firſt caſe in my Treatiſe on it, that it was ſucceſsful in curing a confirmed hectick in ſuch an habit, when the Water at Briſtol failed. Schoeffer a ſenſible Phyſician at Ratiſbon, in a Treatiſe of his, has juſtly obſerved, that it is neceſſary to attend more to the nature of Diſorders than to ſymptoms. And Dr. Adair has, with great propriety publiſhed ſome medical cautions upon the ſame ſubject. My Books are full of the matter of both. But what is to be done with thoſe who are determined to follow empyrical modes of practice, without ſeeking after, or being diſpoſed to attend to better knowledge, or who can teach them?

§ A burning Fever accompanied with inflammation both of the lungs and pleura, and great weakneſs after once loſing blood, was very near proving fatal even to a young Man. And if the veſſels had not burſt, and a ſpitting of blood came on, probably would have been ſo; ſo highly tenacious, and of ſo indolent and inſeparable a nature, were the morbid humours, and ſo impacted on the lungs.

‖ Three Children, (all their Parents had) died in one houſe, of the meaſles, in one Town; and four in one houſe in another.

burning

burning Fevers ſtill going on*, and bad coughs becoming general.

## CHAPTER XIII.

### *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1790.

AFTER the great rains in the preceeding Autumn, and a warm, moiſt, and quite open Winter, the Spring was uncommonly cold, dry, and harſh, with ſevere winds out of the north-eaſt, raw ones out of the ſouth, and very tempeſtuous ones out of the north-weſt, and weſt, ſucceeded by large quantities of rain. And this diſpoſition to tempeſtuous, wet, and alſo cold weather, continued through the Summer. For though it was, at times, very cloſe and hot, and once attended with very violent lightning, yet cold did, on the whole, ſo predominate, that there were violent hailſtorms even in the middle of that ſeaſon. A cold wind prevailing even then, while another current of air with clouds came in a quite oppoſite direction, viz. from the ſouth, for ſeveral days together. The very tempeſtuous and extraordinarily cool and raw weſtern one however was generally prevalent, and the great ruler of it. Rendering it un-

* After ſome cooler weather out of the north-eaſt, even a Child between 3 and 4 years old, died of a phrenzy. And a bad Eryſipelas, that would not ſuppurate, proved fatal, as ſuch, deſcribed by Hippocrates, did, in Stat. Peſt.

uſually

uſually cold in general, excluſive, as I have ſaid, of ſome few returns of ſultry weather of ſhort duration. It was alſo, as I have obſerved, exceſſively moiſt, from the great quantity of rain that fell; there being more or leſs almoſt every day, and ſeldom a dry one. And from theſe frequent falls of it, and the great quantity of vapours that in conſequence, at this ſeaſon, ſoon roſe again, and ſtagnated in the Air, the ſun was generally clouded, and the ſky obſcure, and the weather neceſſarily unwholeſome.

As the Summer was remarkably cold and wet, the beginning of Autumn was as uncommonly warm, and the Air very cloſe and ſtagnant: the beginning of Winter, on the contrary, very tempeſtuous. And after the remarkable thunder hailſtorm, that proceeded with a tempeſtuous hurricane with ſuch violence, through the kingdom, the weather in the beginning of Winter was very wet and windy out of the weſtern points, and exceſſively changeable: but, excluſive of a fall or two of ſnow, that did not lye long, quite open as the laſt.

In the very moiſt, warm, open and often ſtagnant ſtate of the Air and weather, in laſt Autumn and Winter, the meaſles were very epidemical, and uncommonly fatal, in large cloſe Towns, as I have already obſerved. And in conſequence of a great change from this to ſevere cold, in the beginning of Spring, the Influenza with complaints on the lungs, and the chincough of a bad kind, grew alſo very prevalent, going on through the Summer. Agues and burning Fevers were alſo numerous, very ſluggiſh and apt to hang on long, and alſo apt to return; many of the latter, even early in the Spring, coming to a fatal iſſue. They were attended with great weakneſs, and a quick and weak pulſe: a Diarrrhæa coming on in ſeveral caſes; in ſome of which the ſtools were very fœtid, and even black, the putridity was ſo great.

I need not mention that, on the riſe of theſe Fevers the morbid humours were ſometimes determined to the lungs, bringing on inflammation in them; nor that at others they fell

fell upon the liver and ſtomach, having the ſame effect: while, on the contrary, in ſome they took a different turn, and were moſt diſpoſed to affect, and make a greater impreſſion upon the head.

Rheumatic Diſorders prevailed both with and without Fever. Several were afflicted with bad coughs, ending ſometimes in conſumptions; and ſome had dropſies. And among other complaints, for both the Spring and Summer were remarkably unhealthful, many were taken with convulſive Fits, and ſeveral perſons, as in ſome years of late, dropped off ſuddenly.

In the intemperately hot weather in Summer, many were taken ill in the fields, and obliged to loſe blood; the foul humours were ſo greatly rarefied, yet withal confined in the veſſels, and the latter ſo oppreſſed by the combined powers and action of heat and cold. And in the cold, moiſt, very tempeſtuous, and at other times, ſtagnant ſtate of the Air in it, burning Fevers were attended with an high degree of putreſcence, extreme debility, and great lowneſs of Spirits; the diſſolution and corrupt ſtate of the foul humours were ſo great†. Moſt complained of great giddineſs of the head in them: and they were long, as I have ſaid, in wearing off. In ſome the corrupted tenacious humours took a turn outwardly, by way of impoſtumation. But even young perſons, capable of making ſuch efforts, were ſometimes ſo reduced by the profuſe diſcharge of foul humours from them, as to ſtand in need of the Bark, and a moderate uſe of Port Wine, to ſupport them under it. And in ſuch caſes, theſe methods were found uſeful and neceſſary. The Bark alſo, exhibited in this manner, by way of ſupport, under great reduction of the conſtitution, after a profuſe diſcharge of the diſſolved morbid humours

† Towards the latter end of this ſeaſon or the beginning of Autumn, accounts were received, that there was a bad Fever attended with a ſore Throat in Cornwall, of which 15 Perſons had died; and that it was fatal in 3 days. And a Diſorder ſomewhat ſimilar was ſaid to prevail at Marſeilles.

internally

internally by a Dyſentery, will ſometimes agree tolerably well, as I have already inſtanced in a caſe of that kind; and after the uſe of Calomel in ſome caſes, on account of any great weakneſs that, after taking it, has come on in the courſe of the Fever, requiring ſuch treatment. And theſe are the chief, if not only caſes, I have known, that would admit of its proper uſe: but not others differently circumſtanced or treated, at leaſt not ſo early in the Diſorder. In violent burning Fevers therefore, where nature can get no relief by the ſkin, nor even by the ſecretions of the bowels themſelves, nor without impoſtumations in ſome viſcus or other, it ſeems to me very extraordinary practice to lock up by ſo powerful an aſtringent as Bark, the only outlet nature ſtands a chance of getting any relief by; and whereto the groſs, tenacious, impure, and corrupting humours therefore are frequently determined for diſcharge; and which is almoſt always wanting as a paſſage for draining a great part of ſuch foul matter off. And the beſt reaſon that can be offered is, that many recover under ſuch a treatment; but notwithſtanding this it is far from being a a good one; ſince nature often brings on a recovery, and effects the cure under the greateſt difficulties, and ſometimes even when the greateſt obſtacles are put in her way.*

Even in the Plague itſelf, which is undoubtedly a burning Fever of a peculiar kind, an infectious and general mortal Diſorder, that ſwallows all other Diſeaſes, and the forms of them, which under milder peſtilential conſtitu-

* A Gentleman however through the ill uſe of Bark and Port Wine, in the beginning of one of theſe Fevers, hardly eſcaped an attack upon the brain, by leaving them off and the uſe of Clyſters. And really was ſo affected in his lungs for a conſiderable time, thereby in it, as to endanger his falling into a conſumption afterwards.—And a young Woman actually did drop off, in an uncommon manner, ſuddenly, after ſuch treatment, when ſhe was apparently ſo far recovered as to go out, and appeared almoſt well. For no Perſon is in ſafety, or can be free from danger of a relapſe, or tranſition of the Diſorder into worſe complaints, while the morbid humours in quantity are retained.

tions

tions are retained‡, I doubt not but ſome would be found hardy enough to exhibit bark, under a notion of reſiſting putridity and ſupporting ſtrength, without any regard to the tenacity and conſequent inſeperability of the morbid humours, even in the firſt ſtages of that Diſorder. The conſequence of which we have already ſeen, in the dreadful mortality attending ſuch uſe of it, in loaded habits, in the endemial Diſeaſe of the weſtern part of the world, the yellow Fever: which, under a violent intemperature, partook ſo ſtrongly of a peſtilential nature, laſt Summer and the beginning of Autumn, as, through this and bad treatment at firſt together, to prove mortal in a degree equal, in proportion to the number of inhabitants of Philadelphia, to that of the great plague of London itſelf.

After due evacuations indeed, either naturally or by medicine; and in thoſe ſtages of Diſorders, wherein, after them, nature begins to droop, Bark and Port Wine, properly uſed, ſometimes are noble remedies. As they are likewiſe in gangrenous ſore Throats of the putrid kind, after the uſe of vomits; and alſo in gangrenes external, to ſtop their progreſs, and promote the ſeparation of the mortified parts; if due care be taken to give proper relief to the conſtitution, both before and during their uſe. But in vain often ſhall we expect theſe good effects from the indiſcriminate uſe of them; which are by no means likely to come on but under proper circumſtances, judicious management, and general good treatment.

In the tempeſtuous, wet, and very changeable weather in the latter end of Autumn, and in Winter, the ſmall Pox

‡ In the epidemicks of Hippocrates therefore we meet with no ſuch word as λοιμος peſtis. This dreadful Diſeaſe however is certainly one of thoſe, that by divine power, in a miraculous manner, was inflicted upon the Egyptians, as we learn from holy writ. And was at leaſt as early in the world, in a natural way, as that memorable ſickneſs called the plague of Athens; and probably long before, if we may judge from the word λοιμος itſelf, in uſe before this among the Greeks.

raged

raged in many parts of the kingdom, and were almoſt general; carrying off vaſt numbers, as the Meaſles did laſt year, though they were ſeldom of the confluent kind with us. The Diſeaſe was frequently attended with great itchings, ſo foul and acrid was the ſtate of the humours; and the Pocks were often of a pale, ill-looking, and ill-conditioned kind. The Diſorder by inoculation however was attended with remarkable ſucceſs till towards the latter end of Winter, and beginning of Spring.

## CHAPTER XIV.

### *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1791.

THIS year was diſtinguiſhed, in a very peculiar manner, by the very tempeſtuous winds that blew, and ſo often returned, at times, through the whole of it; and alſo by its intemperature, in regard of cold, in Summer; the exceeding fine, and uncommonly warm weather in the beginning of Autumn; the great changeableneſs of it; and the extraordinary, and often ſudden alterations in the Barometer; it riſing to 2 degrees above ſettled fair in the Summer, and falling as much in proportion, that is half way between great rain and ſtormy weather, more than once in Autumn, varying in the whole 2 inches and a quarter.

The latter end of Winter, or beginning of Spring, indeed, was fine with regard to power of ſun, for ſome weeks. But there were withal ſome very piercing winds, firſt out of the

the north-eaſt, then out of the north-weſt, and ſome yet colder and rawer, and having greater influence on the body, out of the ſouthern points. And in the night of the 18th of March, before a large quantity of ſnow fell, the weather was ſo ſevere, and wind ſo cold, out of the firſt mentioned quarter, that an horſe was ſaid to be killed by it, others diſabled from travelling, and ſome men, on the coaſt of Suſſex, almoſt ſtarved to death. And again about the middle of Summer, there was ſuch a return of cold weather, with ſharp winds and ſevere froſts on nights, and in ſome places ſnow; and ſuch uncommon ſtorms of hail, as had hardly been known in the memory of man. And yet there was at times alſo ſome very hot weather, ſo great were the changes in the atmoſphere.—Alſo about the middle of this ſeaſon, after a good deal of gentle rain, there was a ſudden change from mild to very cold weather and winds, and from ſouth to full north. Even at this time however, though ſo cold, a meteor appeared in the night, in a direction from eaſt to weſt; ſhewing a conſiderable power of heat withal in the atmoſphere, though there were hail-ſtorms and ſtorms of ſnow, even in this uſually hot part of Summer, and many more in the beginning of it.—After this there were frequent returns of rain, tempeſtuous cold winds, chiefly out of the weſtern points, and perpetual changes of the weather from warm to cool, et vice verſa. Though there was, as I have ſaid, more of cool than hot weather, the former being much predominant.—In the latter end of this ſeaſon indeed there was ſome very hot weather, nay ſome exceſſively ſo, but very changeable as it had been; it being alſo, at times, very cold and that ſuddenly. There was alſo a great deal of rain, and ſometimes high winds out of the ſouth-weſt and weſt as before.—The weather likewiſe continued extremely changeable in the beginning of Autumn, though on the whole remarkably warm, with ſome ſudden returns of cold. For ſome years paſt it has been common to have the fineſt weather in the year in this part of it, which was peculiarly the caſe this year in the beginning of this ſeaſon. There was however a vaſt quantity of rain before the end of it: and then, with an exceſſively cold and raw tempeſtuous wind out of the north, a great fall of ſnow and ſome very cold, but very changeable weather, for ſome weeks; it often thawing and even rain-

ing, between returns of very ſevere and falls of ſnow.—In the Winter, particularly the latter end of it, the weather was exceſſively variable, as it had been in general throughout the year; and either uncommonly warm, or exceedingly cold, the wind changing into the oppoſite points of north and ſouth daily‖.

Immediately after the Winter ſolſtice burning Fevers appeared as uſual, but in a more malignant form, and attended with very atrocious ſymptoms. On the attack a violent vomiting ſometimes came on, that nothing could alleviate and take off for 3 or 4 days. And directly on the ceſſation of it, the brain became violently affected, two young perſons dying phrenetical about the 7th day§. The ſmall Pox in ſeveral caſes not of the confluent kind, and even in ſome by inoculation, was now complicated with the burning Fever through the whole Diſorder in many: and it attacked more on the decline of it, they frequently with difficulty recovering. Impoſtumes in the legs, feet, arms and armpits, becoming now common among inoculated Patients, though there was not an inſtance of the kind before among an 100 Perſons. Many alſo in Fevers were afflicted with the ſore Throat; an effect undoubtedly owing to the uncommonly warm ſtate of the Air, for the ſeaſon, and its great changeableneſs, and ſometimes alſo very cold ſtate. And even as early as the latter end of

‖ There was an uncommon Meteor over the Town of Birmingham, one evening in the middle of Winter, that ſo enlightened the air as to be ſeen at ten miles diſtance.

§ A Boy about 9 years old, in one of the Fevers, after lying longer, attended with violent pain in the head, and a conſtant return of delirium every night, at length ſunk under it. It was brought on by imprudently repelling a rheumatic complaint in one hip, by the uſe of the cold bath: the diſorder creeping on by degrees afterwards, and as the Winter advanced, till it at length broke but in the violent Fever above deſcribed. Another Fever alſo, in a young Man, was brought on by the imprudent uſe of it: which, if a plentiful expectoration had not came on in it, and continued through its decline, would probably alſo have proved fatal.

A little Boy alſo was ſoon after attacked with a burning Fever, attended with affection both of the head and breaſt; which, if he had not had timely aſſiſtance given him by the uſe of the lancet, would probably have ended fatally. As it was, the Diſorder in his breaſt continued ſo upon him for ſeveral months, that he appeared, though a child, to be in a conſumption. He however, through the help of a long continued, though difficult expectoration, at length recovered.

Febru-

February, the ſcarlet Fever and ſore Throat appeared in a Town where there are Glaſs-houſes; there being ſome pretty violent caſes of that Diſorder. There were alſo ſome bad ones of the acute dyſentery at this time†.

During the inclement and changeable weather in the latter end of Spring and beginning of Summer, ſore mouths, and ſome of them very bad ones, were a general complaint Many were affected with rheumatic Diſorders in Fevers, and many went off in conſumptions. Further in this ſeaſon, when the hailſtorms and ſnow fell, Fevers were very epidemical among children; ſome being ſo much oppreſſed with phlegm, and affected with ſuch difficulty of breathing, as to be in danger of being ſuffocated.

† A Boy 12 years old, after taking a violent cold, by putting off his clothes when he was hot, was attacked with a burning Fever, accompanied with a Dyſentery. The Diſorder went on, with an increaſe of pain in the paroxyſms, which returned regularly every night, for a month Then, upon its decline, he was affected with both only every other night; the caſe from hence moſt evidently ſhewing itſelf to be the preſent burning Fever, attended with the other complaint. The Diſorder began with obſtructions in the bowels and a want of ſtool: and after the exhibition of a doſe of Calomel, the foul humours making a tranſition, or being tranſlated into the limbs, it then took upon it the appearance of an acute rheumatiſm. Returning however into the bowels, he had black and offenſive ſtools, during the remaining courſe of it, attended with moſt violent pains in the bowels, upon each increaſe or return of Fever, as I have ſaid. But though reduced at length to the greateſt exigency, and in real danger, by waiting properly on the caſe, with the aſſiſtance given him, he gradually recovered. Now from this caſe what can be plainer, than that the conſtitution by the Dyſentery carried off the cauſe of the Fever, and that the foul humours were not diſpoſed to paſs off any other way? And that rheumatic complaints, inflammation of the bowels, Diarrhæas, Dyſenteries, inflammations in the breaſt, and diſorders of the lungs, Deliriums, Phrenſies, and the whole tribe of complaints attendant on Fevers, are none of them the original Diſeaſe, but only accompaniments of the latter. Coming on variouſly with them in different perſons, and increaſing under them, as the body happens to be originally diſpoſed, by reaſon of the weakneſs of any of the viſcera, or peculiarly circumſtanced with reſpect to the quantity, or quality of the foul humours, at the time of the attack, or during the courſe of the Diſorder, and the latter diſpoſed to fall here or there, and bring on this or that complaint, the effort for the diſcharge of which is the Fever. Hippocrates by obſervation carries the matter to the greateſt length; for he ſays, that even in lingering caſes, and ſlow Fevers that ended at length in Dropſies, efforts even then went on, and that perſons ſo affected had febrile ſymptoms before death. His words tranſlated are, *ac fere omnes tumoribus corripiebantur, et in aquam inter cutem evadebant; horrore concutiebantur et ſub mortem delirabant.*

And ſome time after this, numbers of them had vomitings and Diarrhæas. Many were alſo attacked with inflammatory Diſorders in the bowels in Fevers, and ſome had pains in the back*.

In the very wet, changeable, cold, and tempeſtuous weather in the latter end of Summer many grown Perſons were alſo ſubject to fluxes and other complaints of the bowels; and ſome, who were not ſo affected, to Fevers with coughs; there being at this time alſo a return of the Influenza among children. Many of them as before continuing to be afflicted with ſuch quantities of phlegm, as to kill ſome, and endanger the lives of others§. Fevers at this time were ſometimes attended with eruptions, and diſcharges of the foul humours externally ‖; and ſome had a bad kind of ſhingles without them.

In the beginning of Autumn complaints in the ſtomach and bowels were very common, through the repulſion of tenacious humours internally, and the oppreſſion ariſing from thence, by reaſon that ſuch foul matter would not paſs off on account of the extreme inclemency of the weather. And ſome were even attacked with inflammations in them and the kidneys, others had Diarrhæas.—About the middle of it, or rather later, when there had been great rains, many children were affected with the Influenza, that is, a Fever with complaints in the breaſt: others had it with the ſore Throat. Dreadful burning Fevers re-

* In the cold and inclement ſtate of the atmoſphere at this time, not only human bodies were affected, but horſes with colds and coughs; which killed many that had not a plentiful running at the noſe. And in the changeable and cold weather in ſummer afterwards, there was a kind of general diſorder among Cows, eſpecially milking and feeding ones, and ſome died. And a violent Fever was ſaid to be in Lincolnſhire among them, attended with a great ſwelling of the head and throat, that killed in 24 hours.

§ In ſo oppreſſed a ſtate were the bodies of ſome Children, that one died ſuddenly immediately after taking, if not while it was at the breaſt.

‖ A Woman in one of theſe Fevers had an eruption on the head, and runnings from behind the ears, which relieved her after having it 3 weeks before this happened.

turned

turned at this time, beginning with the grievous ſickneſs before mentioned, and ending in delirium, or phrenſy, and death, as they had done in the Spring*. Some dropping off in others accompanied with inflammation and at length gangrene in the bowels‖, or inflammation and impoſtumation in the liver†, &c. Caſes now, from the much increaſed tenacious ſtate of the foul humours in the blood, and their incapacity of being thrown outwardly, often ending in internal impoſtumes in the viſcera, as they had before that period, in external ones; in order, by their diſſolution, to diſcharge ſuch deadly matter from the body, that being now the only way nature had left, in many caſes, of attempting to preſerve life.

In the latter end of Autumn, and very cold weather in the beginning of Winter, there were numerous inſtances of ſudden death: and many apoplexies and and palſies often fatal. And immediately after the Winter ſolſtice burning Fevers gained ſtrength: and many had violent phrenſies in them, even children and young Perſons, they being apt to run through whole families§. And in the ſevere, very changeable, and damp ſtate of the Air in the middle of this ſeaſon, the Influenza was very bad, eſpecially in London.

* A young Man died now of one, attended with theſe ſymptoms or complaints and the ſore throat, in 4 days.

‖ An elderly Gentleman, who had firſt in his Fever a Diarrhæa, had after this inflammatory obſtructions in his Bowels, that ended in the iliac Paſſion and gangrene: he died in 14 days. See Hippocrates concerning theſe Diſorders in Stat. Peſt.

† A Man between 20 and 30, ſubject to ſcorbutic eruptions, and who had lately had ſome very bad ones in his legs that were imprudently repelled, died after ſtruggling in vain with it for ſome weeks, of a bad burning Fever accompanied with inflammation and at length impoſtumation in the liver.

§ A Child about 10 years old, after having a phrenzy in a burning Fever for a fortnight, which had come on twice before, died at length in a comatoſe ſtate. And another in the ſame family, was attacked with the ſame kind of Fever.

# CHAPTER XV.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1792.

THIS year peculiar for the coldneſs, wetneſs, and tempeſtuous ſtate of the weather, was however moſt remarkable for the uncommon changeableneſs of the air in it. Which made the Summer in particular the coldeſt and moſt uncomfortable one I ever knew; and the ſtate of the weather in Autumn, for that ſeaſon, was full as bad: the Air being then quite full of vapours, with a ſometimes ſtagnant ſtate of it, and ſo prodigiouſly foul, particularly in London, that Coaches ſometimes could not be driven along the Streets in ſafety.

The joint effects of this inclement and impure ſtate of the atmoſphere began to ſhew themſelves even early in the year, in more violent burning Fevers than had been uſual at that time in former ones†. Theſe had been preceeded by a dreadful Chincough in the Winter, fatal to numbers of

† One Family was affected in a very peculiar manner indeed: a married Woman in particular, who had a relapſe, now very common in Fevers, attended with convulſions, which was very near proving fatal; and a Boy 6 or 7 years old, who lay inſenſible, with the lower Jaw dropped, and the tongue parched almoſt even to blackneſs, for more than a fortnight, under apparent ſigns of diſſolution, a great part of that time. The former, however, having taken a little Calomel early in the Diſorder, was in a condition of being ſupported by the bark when weakneſs came on, and thus recovered. As did alſo her Huſband, who had the Fever in a milder way. The Boy alſo weathered the diſorder and recovered under a ſimilar treatment: as did alſo another child, though one of them died not long afterwards.

Children

Children in ſome Towns in Derbyſhire and Yorkſhire, where it was in a peculiar manner prevalent. Hanging on, with frequent violent returns in many, for half a year or more, even among thoſe who recovered; and being accompanied with ulcerated mouths, attended with great putreſcence, during the height of the Diſorder, in ſome, and with foul eruptions on the ſkin in others, manifeſt tokens of its highly peſtilential nature.

Burning Fevers under their various forms, as attended with inflammation of the bowels, breaſt, &c. went through the Summer as uſual†, but in the Autumn were very bad indeed; being often attended with phrenſies, and frequently mortal‖. Many at this time complained of a ſenſe of great coldneſs, laſting for ſeveral days in their beginnings,

† The intemperature and changeableneſs of the air in Summer was ſo great, that a young Man was ſeized with a phrenzy as he was travelling; the effects of which upon his brain did not go off for ſeveral days.

‖ A Girl about 16 years old, ſoon after the firſt appearance of the menſes, and an intermiſſion of them, and want of regular returns, was taken with a fit of inſanity, which may be conſidered as hereditary, her Father and others of her Family, having been ſubject to that Diſorder. During its continuance ſhe complained one day of a ſenſe of great coldneſs; which not being properly attended to, all the ſucceeding ſymptoms were looked upon as dependant on the original Diſorder; and though ſhe had undoubtedly, at that time, an attack of a Fever, the nature of the caſe miſtaken. For with true Phrenitis ſhe had now great heat, eſpecially internally, thirſt, and a very dry and even brown tongue. And the conſequence of this miſapprehenſion was, that, after uſing medicines to lower the powers of the conſtitution, under a notion of relieving the original Diſorder, ſhe gradually ſunk and grew weaker, falling at length into a coma, and going off in it, with the other febrile ſymptoms attending her to the laſt. So cautious ought Practitioners to be in obſerving well, and marking every ſymptom that ariſes, as well as attentive and careful in getting knowledge of the true nature of the reigning Fever, that they may be able rightly to diſtinguiſh the difference of Diſorders. For the want of this, and not paying proper attention to the attack of coldneſs above mentioned, was probably of fatal conſequence in this caſe.

* An old Man went off in a burning Fever attended with a gangrene in one leg —And a young Woman, between 20 and 30 years of age, of a very ſcorbutic habit, alſo, died comatoſe ſoon after the attack of one; the whole maſs of blood being ſuddenly in a ſtate of diſſolution.—She had a flux by the bowels about a month before, which then relieved her; and before the

nings§; ſo unattenuated and tenacious were the humours, through the ill effects of the preceeding cold Summer upon them, and the great retention and accumulation of them in the veſſels There being in conſequence thereof, a very imperfect circulation through the finer external veſſels, occaſioning this coldneſs; all the heat centering within, as is always the caſe in bad Fevers of the burning kind From the ſame cauſes, the retention and accumulation of tenacious foul humours in the veſſels by the coldneſs of Summer, the Influenza on the coming on of colder weather in Autumn, alſo became general, and frequently mortal. Sometimes more ſuddenly from violent inflammation, ending in mortification of the lungs; or by ſuffocation from a load of foul humours thrown ſuddenly upon them; at others, later in the Diſorder; and ſometimes alſo through ſucceeding Diſorders brought on by it.

Among the number that died both of this Diſorder, and burning Fevers attended with other complaints, many were young Perſons. And many affected with them, were remarkably ſwollen for ſeveral days; a ſymptom that often ſuddenly went off as in 1778. The ſcarlet Fever and ſore Throat after a violent manner, as in that peculiar year, was

attack of the Fever, a flux of humours to one arm; evident ſigns of the foul ſtate of the juices. This fatal caſe moſt probably came on for want of cleanſing a foul habit after the Meaſles, by the uſe of Cheltenham Water, or ſome other proper method.

A Man of a groſs habit had an inflammation of the liver or hepatites, attended with intenſe pain, in the beginning of one of theſe Fevers, for which he was oblired to loſe blood ſeveral times, in pretty large quantities; bleeding however, ſo often repeated, is not often well borne in the preſent Fevers; an inſtance whereof will ſoon be taken notice of.

§ See Hippocrates de Morb: vulg. in Stat. Peſt. concerning this continuing coldneſs on the attack of burning Fevers, but affecting chiefly the hands and feet in thoſe he deſcribes. It being followed by a very peculiar comatoſe diſpoſition: in which way they went off, even thoſe attended in Fevers with phrenzy. His words, in deſcribing the extraordinary nature of the former, tranſlated are—*His quidem pedes ſummi et manus frigidiores evadebant, multorumque maxime circa acceſſiones, deinde vero lente nec probe recolescebant.*—Concerning the latter he writes thus—*Quin et ſimilia phreneticis fiebant. Atque hi omnes ſine ſiti erant. Neque phreneticorum quiſpiam vehementer inſanivit, ſicut in cæteris uſu venire ſolet, ſed ex mala alia quædam et languida in ſomnum degravatione graviter peribant.*

alſo

alſo prevalent at this time*; and there was likewiſe a return, in this autumnal ſeaſon, of the bad Chincough abovementioned.

Many Perſons, without any preceeding indiſpoſition, and apparently in good health, died ſuddenly this year, as well as others of bad habits; the whole maſs of blood, as appeared by the uncommon ſtench ariſing from the body, and the livid ſpots upon it, immediately after death, being ſometimes in a ſtate of putrefaction before it —Many, and among them not only middle aged and young Perſons, but alſo Children, had obſtinate Jaundices; and they were fatal to ſeveral old Perſons. As were likewiſe Conſumptions to thoſe of all ages. There were alſo numerous inſtances of Inſanity this year§.

* A Child died of this Diſorder, greatly affected with it under the hot treatment —It is certainly in general male practice to egin with an hot or aſtringent method, eſpecially in a Diſeaſe attend d with ſo great internal inflammation, however neceſſary it may be in ſome caſes, to ſupport Patients thereby in the latter end of them.

§ A young Woman about the period of the return of the menſes, which were attended with a very ſmall diſcharge, was ſeized with a convulſive Aſthma, complicated with the nervous Diſorder called St Vitus's Dance. After loſing ſome blood, ſhe was relieved chiefly by a doſe of Calomel, and repeated vomits.

CHAP

# CHAPTER XVI.

## *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in* 1793.

THE Winter, in the latter end of laſt and beginning of this year, as that in the end of 1789 and beginning of 1790. was quite open throughout, but abounding in raw, tempeſtuous weather, and high winds, chiefly out of the weſtern points, and remarkable for the great rains that fell in it, and conſequent dampneſs of the earth and miſtineſs of the Air; the weather in the latter end of it, and beginning of, and all through the Spring, and even beginning of Summer, being more ſevere than in the middle of it, as has been the caſe in ſeveral preceeding years.—After the firſt cold weather, even early in the Spring, there was a great deal of ſettled rain as in the preceeding ſeaſon, ſucceeded by raw and gloomy weather, and a foul and moiſt Air, with now and then a fine day and clearer atmoſphere. The ſevere cold returning after this, and the wind ſettling in the north eaſt, which became the ruler of the year. This weather continuing, and there being perpetual changes from any warmer ſtates of the Air, to ſuch cold, raw, and ſometimes ſevere ones with high winds, that with foul and wet weather, great ſnows alſo fell as late as in the latter end of May, and beginning of June. This ſeaſon being remarkable for its wetneſs and moſt inclement coldneſs; for the weather was ſo ſevere, as to freeze Ice in the night as thick as an half-crown, even in the latter end of June.

After

After this extraordinary coldneſs in Spring, the weather grew on a ſudden ſo hot that people could hardly bear this uncommon tranſition ſo ſoon from great cold to extreme heat, their very breath being hot, and they not able to reſt in their beds on nights. The heat in the atmoſphere a this time was ſo great, that before the middle of July, Farenheit's Thermometer hung facing the north, in a proper ſituation where there was no reflexion, was more than once up at 85, and by one 87; and not lower any day, in the hotter part of it, than 82 and 83, for ſeveral days together. The extreme heat continuing longer than in any Summer for 60 years paſt: that in 1750, 1778, 1779, and even in 1783, being of much ſhorter duration.

This had ſuch an effect on the ſucceeding Autumn, that in conſequence of it, that ſeaſon was uncommonly fine, warm, and dry, to the falling of the uſual rains in it, which this year came on very late, not before the beginning of December. But when they did come, falling in ſuch quantities ſo ſuddenly as to occaſion large floods; there being ſome very cold, froſty weather, with a foul atmoſphere, in the beginning of Winter after them, and a continuance for ſeveral days, of ſuch weather before the middle of Winter, but that went off about that time*. However there were very ſharp froſts, generally on nights, after this: the weather being often warm and open in the day, though the Air was ſometimes cool and damp. In the latter end of this ſeaſon, the weather was very wet; there being ſharp froſts on nights, and a colder ſtate of the Air afterwards.

In conſequence of the unſeaſonable and unwholeſome ſtate of the Air, there were burning Fevers with phrenitis in the Winter*, as there had been in the Autumn; thoſe of the riſing

* A young Woman, ſiſter of the Boy that was ſeized with a Phrenſy while travelling, was, in the Winter, after an intermiſſion of the menſes 3 months, attacked one morning with a Phrenſy; and would certainly have jumped out of a chamber window, had ſhe not been prevented by a fellow ſervant; falling

riſing year coming on as uſual with increaſed violence ſoon after the Winter ſolſtice, and being frequently mortal under all their forms, and very ſoon too So that more Perſons dropped off, and many of them young ones§, than I ever knew at this time of the year. Some of theſe Fevers were attended with inflammation of the lungs, ending in impoſtumation‖, and ſometimes in mortifica-

ing immediately into a convulſive fit; all of which happened on the coming on of a burning Fever. And notwithſtanding this increaſed action of the whole body, there was ſuch a ſtrong tendency to total ſtagnation, that her fleſh had a clammy coldneſs to the touch like that of a dying Perſon, ſhe looking withal very pale and wan. This peculiar coldneſs laſted for ſome hours; ſhe being at the ſame time ſo faint that no blood could be taken away, for the preſent, with ſafety. Seven or eight ounces however were drawn after ſhe grew warmer, the loſs of which ſhe very well bore. And by the uſe of this, a vomit afterwards, and a doſe of Calomel at night purged off next day, this violent and dangerous Fever was abated and ſtopped in its progreſs, the circulation rendered free through the veſſels, the oppreſſed ſtate of them taken off, and the Girl ſo effectually relieved that though a paroxyſm came on next morning, at the time ſhe was ſeized the day before, and roſe ſo high as to bring on a delirium, which afterwards returned with a tendency to Phrenſy, yet ſhe recovered, on the whole, with eaſe, and in a ſhort time.

§ Two young Women not more than 18 or 19 years old died of them. One being attacked in 2 or 3 days after overheating herſelf by walking, and probably taking cold afterwards: going off in five days after the coming on of the Fever, and the other after a ſomewhat longer illneſs.

‖ A Gentleman died in the Spring of a burning Fever, attended with inflammation ending in an impoſtumation in the lungs. He loſt blood ſeveral times, in order to abate heat and leſſen inflammation, during the courſe of the Diſorder. And this method was uſed not only before the breaking of the firſt abſceſs, but purſued afterwards, under a notion of preventing a ſecond, which from the ſymptoms, it was expected would otherwiſe happen. He ſunk under the Diſorder.

tion‡,

tion‡. Theſe complaints being now very common, as was alſo that very fatal Diſorder called the Croop among Children. Some had them with rheumatic complaints, or pains in the limbs§; and others with the ſore Throat. But the moſt epidemical and fatal were thoſe joined with inflammation of the pleura and lungs. They were now attended very generally with great weakneſs, and a peculiar coldneſs externally, though there was, at the ſame time, in conſequence of increaſing tenacity and impurity of the humours, and natural inability of carrying on well their circulation and ſecretion through the finer veſſels of the external parts, great inward heat, from quantities of hot vapours riſing within, and being confined internally; they thus coming nearer to the full nature of the burning Fever, or *καυσος Græcorum* as deſcribed by Hippocrates, than theſe of preceeding years.

In the cold weather in Spring bad Fevers went on, and with what affection ſoever of the noble parts, whether of the brain, lungs, or bowels, they were attended, were frequently mortal among grown Perſons, but more fatal to Children, among whom they were, in a peculiar manner, epidemical. In theſe they were often accompanied with the ſore Throat, and bad ulcerations in the mouth; large ſloughs

‡ This was now the caſe of a Lady, who died on the 4th day after the attack: and alſo of a Man of a very loaded habit, who had drank very freely, and had been uſed to be much out in the cold.

§ A Man of a middle age, died of one of theſe Fevers, attended in its beginning with pains in the limbs, and of the kind uſually though falſly called rheumatic ones: for the burning Fever was the radical Diſeaſe, in whatever ſhape it appeared, or with what affection ſoever, internal or external, it might be joined or attended with, as I have already demonſtrated. After having the pains above-mentioned a few days, upon a receſſion of the morbid humours from the limbs, attended with a peculiar ſenſe of internal coldneſs, though he was, at the ſame time, in a warm ſweat externally, the head and the whole nervous ſyſtem were

ſloughs ſeperating out of the former*, ſucceeeded by conſiderable diſcharges of blood from the parts, and ſometimes alſo from the noſe, which appeared to be uſeful; moſt of thoſe who had them recovering*, and others in whom the Fever was of a more ſluggiſh nature, dying; ſome dropping off in an unexpected manner very ſoon. In ſome theſe Diſorders were preceeded by, and even complicated with the chincough: for at this time the bad one of laſt year returned§, being often attended with a burning Fever through the whole Diſeaſe, and children towards the end of it, having frequently bad ulcers in the mouth, and ſometimes foul eruptions on the ſkin, which ſeemed to contribute to the recovery of theſe, but ſeveral died. The Influenza alſo grew prevalent, there were ſeveral inſtances of the Croop, as in the preceeding ſeaſon, and a bad kind of meaſles became epidemical||; but the moſt common and fatal Diſorders with us, in this cold ſeaſon, were Fevers with Pleuriſies and inflammation of the lungs, as I have already obſerved.

were attacked, a delirium came on, and notwithſtanding the uſe of bliſters and other proper methods, at length ſubſultus tendinum, and he died in a few days.

* One Child about 5 years old, had ſo bad a ſore Throat, that a large piece of the Palate ſeparated and came away. And after apparent recovery it died of a relapſe, with convulſions, after going one evening to a Feaſt, and ſitting up too long, and probably eating too heartily. See Hippocrates's obſervations *in Statu* 3tio. *de filiâ Philonis*. It is very remarkable that this Child, and ſeveral others that died, had been inoculated about 3 years before.

§ This Diſorder which was very epidemical and often mortal in the Winter of 1791, and ſucceeding Spring, at Cheſterfield in Derbyſhire and Wetherby in Yorkſhire, is of the peſtilential tribe: as is every other that is communicable through infection by the breath, and I believe, alſo all thoſe that are by conract.

|| The Meaſles were ſo fatal in London, that 4 Children out of 5 where ſaid to die in one Family.

Both

Both in this ſeaſon and the preceeding, many had bad and obſtinate Jaundices§, and other bad Diſeaſes of the liver†. Diſorders alſo of the ſtomach of the chronic kind, and attended with eructations, and want of the powers of digeſtion, were very common†; as well as lingering ones in the bowels accompanied with internal heat, teneſmus, Piles; and ſome had large internal hæmorrhages or diſcharges of blood‡; there were alſo many conſumptions*, and likewiſe

§ A Woman in the Winter had a very bad Jaundice, that turned at length into what is called the black one. She was relieved however under great weakneſs in this dangerous ſtate of the Diſorder. Her cure conſiſted chiefly in the exhibition of ſome gentle doſes of Calomel, and aperients with ſoap, with the uſe of repeated vomits.

† An elderly Man, who had lived freely and enjoyed health long, was now, and had been for ſome time, affected with a Diſorder, ſeated both in the liver and ſtomach. Having not only a want of the powers of digeſtion, in any tolerable degree, but being alſo ſubject to large collections of bilious humours which he vomited up, mixed with other foul ones, ſometimes to the quantity of almoſt a gallon, part of them alſo paſſing off downwards; after which, or the uſe of ſome gentle aperients, he always found himſelf much relieved, though he never received thereby any laſting benefit. His caſe for want of ability to purify the foul humours, thus neceſſarily thrown inwardly for diſcharge, and turn them into their right courſe, as well as to ſtrengthen, and reſtore to their due tone and power of action the weakened parts, at length proved fatal: an hectic Fever coming on, in which he gradually declined in, and ſunk under the Diſorder.

‡ A Man between 40 and 50, ſubject to complaints of the lungs, and having now a Cough that had hung on him ſometime, in a fit of coughing burſt a large veſſel in the lungs and died in afew minutes ſo greatly were the internal veſſels of the breaſt oppreſſed and loaded, through the extreme tenacity and impurity of the humours.—Two Women had alſo very violent uterine hæmorrhages attendant on Fevers, one of them during pregnancy.

* A young Man 17 or 18 years old, of a bad hereditary ſcorbutic habit, and who had been inoculated between 2 and 3 years be-

wiſe numerous inſtances of ſudden death, both now and in the Winter. All of which, together with the fatality attending acute Diſeaſes, brought on a very great mortality: more perſons dropping off with us, particularly in the Spring, naturally inclined to be healthful, than in any year, at this time, for 50 years.

When the extraordinary heat of the Summer ſuddenly came on this year, after the cold weather in Spring, many Perſons dropped down dead in the fields while at work, it was ſo exceſſive. Burning Fevers alſo began to

before, was attacked this Spring with a kind of Eryſipelas, or what is now called Pemphygis, on one breaſt and ſide, attended with a flux of humours into and ſwelling of the adipoſe membrane, and peculiar kind of hardneſs in the parts diſeaſed. The humours impacted in them being of ſo ill-conditioned, indolent and tenacious a nature, that though Calomel was given and repeated in this ſtate of the Diſorder, and other methods uſed to attenuate them, and bring the parts to ſuppuration, no impreſſion could be made on them, or any effect towards their diſſolution produced. They inſtead thereof, and for want of it, making an attack and ſettling on the lungs alſo; whence he became ſubject to a cough, attended with a remittent Fever of the hectic kind. And though quantities of ſaline medicines were now given, and ſuch other methods uſed as bid faireſt for diſſolving and diſcharging the offending matter, he gradually declined though his appetite continued good. An attempt was made by cauſtic to bring on a diſcharge from the parts, and a large eſchar alſo formed itſelf under the armpit of that ſide; but both the artificial and natural effort were totally ineffectual. For the tumor far extended in, and poſſeſſing the whole breaſt of that ſide, and alſo affecting the arm, from compreſſion of the veſſels indeed in ſome meaſure, remained ſtill as hard and indolent as ever, and the parts dry and unattended with diſcharge; even ſo much ſo that the eſchars themſelves would not ſeparate. Large pieces of the ſkin and membrana adipoſa at length putrefying, falling off, and coming away without any ſuppuration, attended with an intolerable ſtench. Under which dreadful circumſtances, accompanied alſo with a conſumption of the lungs, after holding out ſometime he was at length gradually worn out and carried off; his appetite, notwithſtanding his hectic Fever, continuing good to the laſt.

rage† ;

rage†. And a bad kind of Meaſles broke out, and ſpread with ſuch rapidity in the Country in one Pariſh, that near 50 Perſons lay ill of them, and the Fevers attended with peripneumonic Diſorders, that ſucceeded them, at the ſame time. A burning Fever attended with inflammation of the lungs often accompanied the Diſorder, following it afterwards. At other times it came on ſome days after, attended generally with the ſame complaints, but ſometimes not.— In theſe caſes the heat often was ſo great, as, after diſſipating the finer juices, and heating and drying up thoſe more viſcid, to act upon and parch the ſolids as with the force of fire. The Fever frequently running ſo high, and the inflammation being ſo great, that it was neceſſary at times to draw blood. They were in general beſt treated, by giving ſaline medicines with nitre and every thing that had a cooling quality, even when Diarrhæas came on. And when they did not, the uſe of gentle aperients, ſuch as rhubarb and tartar of vitriol and ſoluble tartar, were eminently uſeful, as in 1778‖. In ſome caſes however, wherein violent purgings came on that reduced Perſons to the greateſt degree of weakneſs, it became neceſſary to reſtrain them a little by gentle methods, and to ſupport theſe, and ſometimes other Patients, by mild cordials and the uſe of a little wine, towards the latter end of them.

Thus it was with us at this time—but in the weſtern part of the world, the hot Intemperature was ſo violent, that the peſtilential conſtitution croſſed over the Atlantic

† A ſtrong Boy about 7 years old, died this Summer of a burning Fever with the ſore Throat, under treatment by the Bark &c. as if it had been a putrid one; as did likewiſe a maid Servant in the ſame houſe. Another who took neither medicines nor wine, but only drank Water, recovered with eaſe. The ſame burning Fever with ſore Throat akin to, and indeed of the ſame kind with that in 1778, ran through whole Families: and it is remarkable that moſt of thoſe under medicial treatment, in the village, died; and that moſt of thoſe who let nature take her own courſe, recovered, Wherein may be fully ſeen, what I mean by the truth of ſimple practice uſed by Hippocrates, taken notice of in the Preliminary Diſſertation.

‖ I have already often taken notice of the great uſe of Aperients in burning Fevers, and ſhall ſoon have occaſion to make farther obſervations on it.

ocean, and brought on a raging Peſtilence, under the form of the yellow Fever, at Philadelphia in America, that carried off above 4000 Perſons. It had been ſhewing itſelf, in ſome meaſure, before laſt year in ſome of the Weſt India Iſlands, in an Increaſe of malignity in that Diſorder, but was very fatal indeed in this. Medical Gentlemen taking it at firſt for a putrid Fever, gave Bark and Port Wine as uſual, and treated it as ſuch; but from the mortality attending their practice were ſoon convinced of their miſtake; and after conſulting Doctor Moſeley's Treatiſe on tropical Diſeaſes, and following his way of treating the yellow Fever, had better ſucceſs. But they were not in the right, in calling the preſent Diſorder, becauſe it bore large evacuations, in ſome caſes, well in its beginning, an inflammatory Fever, for it was a peſtilential one. Though they had not however the cleareſt notions of its true nature, they were certainly right in unloading the habit then when neceſſary, both by way of giving relief, as well as of proper preparation for the uſe of Bark, when that was called for*.

Doctor Moſeley, like a man of true learning and knowledge, and ſound judgment, calls the yellow Fever a kind of *endemial cauſus*: it is ſo, but was this year an epidemical one, under a moſt violent peſtilential regulation, whence the great mortality occaſioned by it. He alſo as judiciouſly inſiſts on the neceſſity of proper evacuations in its beginning, before putridity takes place. That thoſe from the ſtomach and bowels, on the riſe of Fevers under a peſtilential ſtate of the Air, are of the utmoſt neceſſity, I have already ſhewn in Pages 156, 157: as is alſo proper drawing away of blood, in ſtrong and loaded habits, accord-

* Mr. Carey in his account of the cauſes that contributed to the riſe of the peſtilential fever this year at Philadelphia, and its fatal effects, very properly mentions among others, the thriving ſtate of that City, and the luxurious way of living of its Inhabitants. For intemperance is a grand prediſpoſing cauſe to Diſeaſe in general, and the ill effects of heat and bad Air on bodies, and their mortal conſequences.

ing

ing to the indications given. And that preparation and unloading the body and attenuating the foul humours, by drinking proper mineral Waters before violent Fevers come on, muſt be of the greateſt uſe, is too obvious a matter to be inſiſted on.

But to return from the conſideration of this dreadful ſtate of the Air and Diſeaſes abroad, to that of them with with us—Though the weather in Autumn then was uncommonly warm, and that ſeaſon fine, it was far from being wholeſome, but on the contrary, much otherwiſe, there being more inſtances of ſudden Death§ than I had ever known. There were alſo bad remittent burning Fevers in all large Towns, as well as other places, as uſual, but that now, eſpecially in the former, ran through whole families, and were in many inſtances, evidently communicated to others, and killed many. But there was nothing ſo ſingularly peculiar to this ſeaſon, as the vaſt number of abortions that happened, and the violent floodings in the 7th, 8th, and laſt month of pregnancy; caſes of the moſt difficult and dangerous nature, and which were actually fatal to

§ A Gentleman about 42 years of age, who had a putrid Fever about 21 years ago, improperly treated in its beginning with the Bark, and that came to no due criſis; and one of the preſent Fevers a few years ſince, whoſe caſe under which I have related in Pages 123 and 124, and that treated in the ſame manner, was productive of no better effects; after a continued bad ſtate of health for ſome years, attended with violent ſpaſms at times, and ſuch extraordinary palpitations of the heart, and ſo interrupted and defective circulation, as to give ſuſpicion of a local Diſorder in the heart itſelf, but which were in reality owing to the impure ſtate of the blood indiſpoſed for motion, and incapable, by any ordinary force, of being kept in it, now died ſuddenly. There being, as I expected, nothing to be obſerved upon opening the body to confirm the truth of the above-mentioned notion of a Diſeaſe in the heart; it being only ſomewhat diſtended and enlarged, by its violent efforts to keep ſuch an heterogeneous maſs in motion, and ſupport life a little longer by them.

many pregnant Women, and very near being ſo to many others‡.

The Fevers, in the latter end of this ſeaſon and beginning of Winter, were of an uncommon kind, and attended with very languid efforts, and extraordinary ſymptoms. The body being oppreſſed, when cooler weather came on, with ſuch quantities of groſs, foul, hot vapours, riſing from impure humours internally, as to bring on difficulty of breathing, that required a freſh influx of Air by opening the windows, leaſt they ſhould be ſuffocated by thoſe that iſſued with their breath. Here we ſee that the heat, as in all bad burning Fevers, remained chiefly within: and this ſtate was accompanied with ſo great dejection of ſpirits and ſuch lowneſs and weakneſs, ſuch a dead pallor of Countenance and glaſſy appearance of the eyes, as made the perſons affected look more like pieces of wax-work than living ſubjects. In ſome the weakneſs was extreme, and attended with ſuch uncommon nervous complaints, that, though in tolerable ſtrength and ſpirits while they lay down, they were not able to ſupport themſelves when they attempted to ſit up, but were ready to drop off the chair they ſat on. And theſe caſes happened to young and ſtrong Perſons, and were ſlow in their progreſs, very obſtinate, and long in

‡ Suffer me to take notice that a ſilly faſhion has been introduced, and prevails with ſome practitioners, namely the diſcountenancing and laying aſide the uſe of bleeding in pregnancy even almoſt under any circumſtances —A Woman from the neglect of it and other imprudent conduct, was ſeveral times in great danger, from an immoderate flux of blood, in the laſt months, and would probably have loſt her life, had ſhe not been relieved by taking away blood ſeveral times, in ſmall quantities, when ſhe grew oppreſſed, or had returns of the flux. By this method however, with the uſe of gentle aperients, ſhe went her full time and was ſafely delivered. Two of theſe caſes however proved fatal: one immediately notwithſtanding the extraction of the Child; and the other 3 or 4 weeks after, in conſequence of Diſorders on the lungs that came on by taking in too much food on a ſudden, by way of ſupporting the Conſtitution.

wearing

wearing off, ſometimes degenerating into a chronic ſtate, and ending fatally. No advantage being gained by the uſe of Bark, even ſo uſed as merely to ſupport them under them; the foul humours being of ſo crude, or tenacious and inſeparable a nature, that the urine had greater paleneſs, and the Diſorder was protracted by the uſe of it*. Nothing ſo effectually relieved, not only in Fevers, but alſo chronical diſeaſes, as gentle continued diſcharges by the bowels by the uſe of Rhubarb with ſaline Aperients, the matter of the Diſorder being indiſpoſed to paſs off any other way||.

And there were not only ſlow caſes, but alſo violent ones†: Diſeaſes being now complicated together in an uncommon manner, and following one another in very quick ſucceſſion§. Burning Fevers during the Winter being often attended with the ſore Throat, and even more remarkable, in many inſtances, for their tardy nature and ſlow progreſs, long continuance, frequent relapſes, and

* One of theſe caſes, in a young Man of a very impure habit, degenerated at length into an Atrophy, and proved fatal.

|| Calomel was alſo eminently uſeful in caſes that required it. See obſervations on the uſe of aperients in burning Fevers, in my Treatiſe on the conſtitution of 1778.

† In one of theſe, treated with the Bark and Port Wine, an almoſt total ſtagnation came on, as in a caſe, under ſimilar treatment in 1778, which I have related: the feet and legs of the Patient, though a ſtrong young man growing cold, and he being ſo much reduced as to be apparently dying. He was however brought about by the uſe of bliſters: but not without a mortification ſeizing the part where one of them was applied, as in the caſe mentioned, and the ſeparation of a large piece of gangrened fleſh. The hair alſo came off the head, and ſome of the nails off the fingers.

§ A Woman between 20 and 30, ſoon after having the meaſles, was attacked with the ſcarlet Fever and ſore Throat accompanied with the Jaundice.

defect of the criſis, than thoſe of the preceeding ſeaſons‡. The ſcarlet Fever and ſore Throat became now very epidemical, even in this cold ſeaſon, as well as the meaſles, and ſmall Pox: the firſt being often followed by a leucophlegmatic habit, and dropſical tendency, as in 1778, and ſometimes a remarkable comatoſe diſpoſition; and in an inſtance or two even a tendency to apoplexy itſelf‖, a Diſorder now become very common.

In the latter end of this ſeaſon and beginning of Spring, many were on a ſudden ſeized with violent Diſorders of various kinds†: ſeveral fell into apoplexies; and many others died ſuddenly. This year being peculiarly fatal to old Perſons eſpecially*: and more of them dropping off, than

‡ In a Child who was taken into the Air imprudently ſoon after the attack of a Fever, upon appearing to be better, the Diſeaſe was thereby ſo confirmed, that after a lingering Diſorder of 4 Weeks, it was at length carried off by it. As was alſo a little Boy, after having eruptions on the ſkin, and other ineffectual efforts, during an illneſs of 7 or 8 Weeks continuance.—Another rather older, of a very oppreſſed and foul habit, died after a ſhort illneſs of only two days: the belly being greatly tumefied, the lips black, and the whole maſs of blood in a ſtate of ſtagnation and putrefaction. A groſs Girl 6 years old alſo narrowly eſcaped, by the foul humours falling into one leg, though with great danger of an enſuing mortification.

‖ A Boy about 10 years old, had an attack of this kind, attended with a full and oppreſſed pulſe, when he was got about after having the ſcarlet Fever, but it was fortunately attended with convulſive efforts: by means of which, having taken a little Calomel before, and the application of a bliſter to the head, he recovered.

† A Gentlewoman in the decline of life, died now of a burning Fever, attended with an inflammation in the bowels and liver, and accompanied with Jaundice; an impoſtumation being formed in them before death. Several others alſo had violent inflammations in the bowels in Fevers.

* A Man who had a congeſtion of humours between the coats of the ſtomach, with a conſtant rejection of his food by vomiting, had

than in any year for 50 years paſt, within the bills of mortality.

## CHAPTER XVII.

### *Of the Continuance and Increaſe of the Peſtilential Conſtitution, in 1794.*

IN the beginning of Spring were almoſt continual rains, and no ſeverity of Air; but after theſe its uſual keenneſs in this ſeaſon came on, accompanied with ſtrange changes in the atmoſphere, and uncommonly ſudden variations of

had at length an impoſtume there that diſcharged itſelf the ſame way: he gradually wore off, attended with a ſlow Fever to the laſt. A Man who had a large diſcharge of blood in his urine all Summer, though above 70, recovered.

Several Perſons were in danger of loſing their lives this year, by the improper uſe of cold bathing. One young Woman actually died at Bridgewater, of a Fever with Phrenſy brought on by ſea bathing. And a Man of a foul habit, who had a ſlow Fever was very near death upon the firſt uſe of it. Two other Perſons were attacked on the coming on of cold weather, from ſuch undue repulſion of the humours in foul conſtitutions, from the external parts to the inward: one of them, a Man, being ſeized with a violent pain and Diſorder in the ſtomach, with a ſtrong diſpoſition to ſtagnation; and the other a Woman with complaints on the lungs, that put her conſtitution to a ſevere trial, and were long in wearing off.

the wind and weather; there being very cold winds out of the north eaſt, and north weſt, and even out of the ſouth, and a good deal of rain at times to the end of it, though on the whole remarkable for a continuance of dry weather.—The beginning and middle of Summer were alſo greatly diſpoſed to drought, in many parts of the Kingdom, any conſiderable rains being only partial. The weather alſo was ſo hot, even in the former, as to raiſe the Thermometer up to 77. Notwithſtanding however this heat, the influence of which was chiefly felt in the middle of the day, the ruling wind of the year, the north eaſt, continually recurred, eſpecially after any rain had fallen, and had a great effect on the temperature of the Air, in the morning and evening; there were alſo very cold winds out of the north weſt, as in the Spring.—After this, towards the middle of Summer, the heat, by reaſon of the drought, was very great indeed, and affected people ſo much that many compared it to that of laſt year; though the Thermometer, by an obſervation regularly and fairly taken, never roſe with us above 78; which is 9 degrees lower than it did twice laſt year, in the hotteſt part of it, and 4 or 5 at other times, while the great heat continued.—When rain began to fall there was a great deal of it, and a great cloſeneſs in the Air afterwards; and then very cold winds out of the north weſt, even at this time of the year, and alſo out of the north eaſt with rain. Which continued alſo, at times, to be the caſe afterwards; and, by reaſon of the ſudden change from great heat, to a cool and damp ſtate both of the earth and Air, had a great effect on human bodies. For the heat of Summer had, by no means, ſuch an effect on the declining year, as that of the laſt; great rains falling 3 months ſooner, that is in the beginning of September: whereas they did not laſt year till the beginning of December.

In conſequence of the very wet, and then cold and dry, and very variable weather in Spring, many, eſpecially Children, had ſlow, obſtinate, and ill-conditioned Fevers, of long continuance, and ſubject to frequent relapſes*;

lapſes*; eſpecially upon taking in Food too haſtily after them, or going out during their continuance†, or too ſoon after they were gone off, into the Air. The Influenza alſo, which, as I have ſaid, had conſtantly returned, in more or leſs degree, every Spring and Autumn, ſince its firſt ſetting in in 1782, became very epidemical; vaſt numbers of Children, in particular, being affected with it; and it often, as well as Fevers without complaints on the lungs, proving fatal among them. With theſe Diſorders the ſcarlet Fever and ſore Throat, Small Pox, and Meaſles were prevalent as in the preceeding ſeaſon; ſeveral Children having tumors of the parotid gland, and others of the face and neck, that ſubſided and went off without ſuppuration, before an attack of the latter. And among other Diſorders, attacks upon the brain without febrile efforts, and ſudden total ſtagnations were very common, ſeveral falling into apoplexies§, or dying ſuddenly; whilſt others who had ſtrong tendencies to ſuch ſtagnations, and extreme weakneſs under them, with great difficulty recovered*.

* Two young Women in declines were taken off by burning Fevers; one of them in 24 hours, by a relapſe that came on about 3 Weeks after the going off of the Fever.

† Two Children in one Family, and one in another, dropped off by theſe means: the Diſorder being ſo radically fixed in them by the conſtringing power of the Air, that all medical methods uſed afterwards, availed nothing.

§ A young Woman in the end of Spring or beginning of Summer died of an Apoplexy.

* A middle aged Gentleman of no very ſtrong habit had an attack of this kind in the Winter; the drawing of blood away in it being prevented by the fortunate coming in of a Gentleman of Judgment, which would probably have been attended with fatal conſequences. An old Woman of 70 alſo was attacked in the Summer, and appeared to be dying, but upon the application of a Bliſter ſhe grew better and had a burning Fever with delirium after it; from which, though the Diſorder hung long on her, ſhe at length recovered.

As to the treatment of theſe ſlow Fevers and tedious caſes ſo ſubject to relapſes†, and wherein natural efforts are ſo languid, and the foul humours ſo difficult of ſeparation, the neceſſity of waiting duly on them, unleſs proper and ſafe methods can be thought of effectually to ſhorten them, is evident enough; as well as the impropriety of weakening too much by large evacuations of any kind, in the beginning of Diſorders, that, by reaſon of their long continuance, require a good ſhare of ſtrength to enable conſtitutions to weather them, and bring on tolerably good criſes and diſcharges of them. And as to contracting the veſſels in the beginning of Diſorders, by the uſe of aſtringents, under a falſe notion of curing them, or ſtrengthening weak habits, and thus confining in the tenacious matter, that is not well diſpoſed to paſs off even when they are more open, the vanity of theſe attempts, and the ill effects of ſuch practice, have already been abundantly ſhewn. Nor, on the other hand, is a farrago of attenuating and irritating medicines, too haſtily uſed and too long continued, nor the immoderate uſe of bliſters and free uſe of Wine in the beginning of Fevers, more eſpecially thoſe of the burning kind, though they be ſluggiſh ones, attended, in numerous inſtances, with more beneficial effects. For, by ſuch means, the finer juices are diſſipated, that ſhould ſupport the Patient in the decline of a Diſorder, and enable the conſtitution to compleat its efforts, and bring on a ſalutary termination of it. But this is not all—by ſuch violent and precipitate methods, the powers of nature are on a ſudden raiſed, and the conſtitution put upon efforts to diſcharge morbid humours, that ought to undergo a more regular proceſs of preparation, and in the ſimple courſe of nature often do ſo, and are, by no means, in a condition to be ſo ſuddenly and haſtily diſcharged. And herein the Hippo-

† Theſe relapſes fully declare the ſame things, that the reſt of our obſervations do; namely the increaſe of the Peſtilential Conſtitution and its effects upon foul humours in the blood, and the frequent inſeparability of them when grown very tenacious; whence the return and frequently fatal termination of the preſent burning Fevers.

cratic

cratic method of treating Fevers, which conſiſted chiefly in waiting upon nature, and duly regulating her efforts, reducing them when too violent, and ſupporting her when neceſſary, notwithſtanding ſome improvements that belong to modern practice, appears to great advantage, and is in ſome caſes eminently ſuperior. For this method, notwithſtanding its defects, always had a certain end in view, namely the completion of the criſis: whereas modern practice, ſo far from having an intention of this ſort, or following, at leaſt in general, this method, ſeems, at leaſt in part if not almoſt totally, to have diſcarded the notion as abſurd.—But let us be careful what we are doing, for there is no digging up and demoliſhing foundations laid ſo deep in the very nature of things, and of true Phyſic; no reverſing the laws of action by which they were originally appointed to move, and whereby they ſtill continue to be bound by the almighty creator. Attempts may be made to cure Fevers by haſty and irregular, irritating, hot, or aſtringent methods; but every good practitioner, who has any obſervation in him, muſt know, that after all this, the criſis muſt be waited for and obtained before health can be well reſtored. Not that I mean hereby to deny that proper means may not be uſed, and efficacious ones too, not only in the beginning but progreſs of acute Diſorders, that directed, by good judgment and a knowledge of their cauſes, may greatly contribute to leſſen them, and put the conſtitution into a right way for their more ſpeedy and due diſcharge. But to return—

When the heat of the Summer came on Fevers began to aſſume a more malignant nature, and were frequently mortal†. They were now often accompanied with the ſore

† Several Perſons died of theſe Fevers at this time, and particularly a Boy, with all the ſigns of putridity and corruption even to blackneſs.

A Man alſo who had been travelling in a Coach, was ſeized with a Fever attended with ſo great putrefaction, that the whole body turned black, except one arm, and ſwelled to an enormous ſize.

Throat

Throat as the ſcarlet Fever, and ſometimes inflammation of the lungs, and had, in numerous inſtances, the ſame dropſical tendency afterwards as after that Diſorder, they evidently partaking of the nature of it. They particularly affected thoſe who drank freely of Port Wine; which was ſo far from preventing theſe *burning*, falſly called *putrid* Fevers, that they came on in ſuch with great internal inflammation, an increaſed violence, and higher degree of malignity§. There were alſo at this time dangerous fluxes during Pregnancy‡.

During and after the rains that came on after the hot weather towards the end of Summer, ſlow Fevers became very prevalent as in the Spring, being in ſome inſtances fatal. They frequently came on, and were attended with Diarrhæas and complaints in the bowels, in which the ſtools were quite black, and highly putrid; Diſorders now very common without Fevers, thoſe who had profuſe diſcharges this way, being greatly relieved by them, it being neceſſary in ſome other caſes to give a little Calomel, where the ſtrength would bear it. They were attended with great weakneſs and lowneſs, not only in theſe but other caſes, in which the bowels were in a more confined ſtate: there being ſometimes bad Diſorders of the ſtomach in the latter, and even tumors of it to be ſeen externally; neither were theſe ſlow Fevers ſo eaſily and well got off in theſe as

§ A Gentleman after one of theſe Fevers, did not recover health, though he took Calomel, till after a ſpontaneous flux by the bowels attended with great internal heat, ſo indiſpoſed were the tenacious foul humours to paſs off.

‡ A Woman, though greatly reduced by one of theſe fluxes, was ſaved by the extraction of the child in the 8th month, with the uſe of a bandage, at that time, gradually tightened, and the taking of a light decoction of the Bark acidulated with ſpirit of Vitriol afterwards. The flux came on by uſing violent exerciſe in a very hot day, with the imprudent neglect of loſing any blood all the time of her pregnancy.

in the former.—But there were not only ſlow Fevers at this time, but alſo violent ones with Phrenſy§. And when the cold winds began to blow after the rains, the Influenza returned†, and the Croop alſo made its appearance: a dangerous Diſorder that by Inflammation and tumor in the internal parts of the Trachea, or inſpiſſation of the tenacious humours there ſeparated, ſoon puts a ſtop to reſpiration, if not ſpeedily relieved by bleeding in the Jugular vein, or by the application of leeches, the uſe of vomits, bliſters, and other proper remedies‡.

In the latter end of Summer not only Fevers* with profuſe Diarrhæas were epidemical, but with the Dyſentery alſo, in ſome parts of the kingdom. And on the attack of them, ſome had a deſcent of the morbid humours into the legs and feet, with diſcolorations of them even to blackneſs, that relieved ſeveral; while others had moſt violent pains in the Face. The very intemperate heat of the atmoſphere for two Summers together, laſt year and this, had rendered foul humours in ſome bodies ſo extremely tenacious, that

§ Even a Child had now a violent burning Fever of this kind.

† About this time a peculiar kind of Fever with ſore throat, that generally came to its height in about 3 days, and akin to the peſtilential Influenza of 1782, was prevalent at Banbury in Oxfordſhire, and by going through whole families appeared to be infectious. It was not often fatal, but people were greatly reduced by it in a ſhort ſpace of time, and when they got abroad, had an uncommonly pallid look, as after that Diſorder.

‡ The Boy, about 3 years old, who was now affected, recovered, but a Child of the ſame family by the Mother's ſide, died of a complaint like it ſome years ago: ſo that there is ſome reaſon for ſuſpecting, that this Diſorder, like many others, may ſometimes ariſe, in ſome meaſure, from an hereditary foul habit.

* Violent Fevers now not only affected human bodies, but alſo thoſe of the brute creation.

there

there were ſome very obſtinate and uncritical caſes at this time, that hung on long, and were, in ſeveral inſtances, at length fatal, or degenerated into dropſical Diſorders that in the end were ſo. And as to other chronical Diſeaſes, there were, in particular, many obſtinate Jaundices* and other Diſorders of the liver, and alſo many apoplexies, and inſtances of ſudden death in this ſeaſon, as there had been in thoſe preceeding‖; this year being remarkable for the uncritical nature of, and want of action in Fevers, as thoſe of 1783 and 1788 had been for the increaſe of it.

As to the nature of the preſent extraordinary ſlow Fevers, as well as thoſe in ſome years preceeding, accompanied with ſuch ſluggiſh action, comatoſe ſymptoms, dropſical tendencies, and unfriendly and often fatal effects, I have already ſhewn with Hippocrates that peſtilential conſtitutions are capable of producing Fevers, not only with moſt violent, but alſo by relaxing the ſolids, and making the humours tenacious, the moſt languid efforts. For the only true ſedative powers, ſo much now talked of and ſo little known, are the want of pure and wholeſome Air taken in, to ſet the moving powers at work, and of its moſt invigorating and bracing qualities, to keep up proper ſtrength in them; joined with the pernicious influence of the corrupt effluvia of putrefying animal fluids, tainting the animal ſpirits, and deſtroying the firſt ſprings of motion in the nerves themſelves; and with the ill effects attendant on increaſed tenacity of all the humours, and want of due preparation of the fluids, even the animal ſpirits themſelves; tending therefore to ſtagnation, unapt to motion, and not well diſpoſed to be moved, and the want of freſh ſupplies

* A Gentlewoman about 40, of a very ſcorbutic habit had now a confirmed Jaundice diſpoſed to terminate in dropſy: ſhe died however of a burning Fever in the end of Summer, with the Jaundice ſtill upon her—Another recovered by the uſe of James's powder taken in ſmall doſes, after Bath waters had failed; her caſe being attended with a ſlow Fever ariſing from tenacious juices, the cauſe alſo of her Jaundice and obſtructions in the liver.

‖ It is worth obſervation here, by way of caution to others, that two young Men died this Summer ſoon after bathing in the river when they were hot—and alſo that a young Woman after the firſt uſe of ſea bathing was ſeized with a Phrenſy.

of

of fine juices neceſſarily ariſing from them. Things moſt evidently pointed out in the feeble efforts of the preſent Fevers, and the highly putrid ſtate of the foul humours diſcharged; in the extraordinary coldneſs on the attack of them ſo often noticed; the remarkable comatoſe ſymptoms in them, and after the ſcarlet Fever and ſore Throat this year; the Apoplexies now ſo prevalent, and numerous inſtances of ſudden death‡. And declaring the increaſe and progreſs of the preſent peſtilential conſtitution, as the following tranſlation of the words of Hippocrates does, a very peculiar, and ſomewhat ſimilar want of action, and diſpoſition to ſtagnation, in Fevers, though in a greater degree, under that he deſcribes. *Erat autem Febrium ardentium conſtitutio hujus modi. Per initium ſopore§ detinebantur cum ſtomachi faſtidio, horroris ſenſu febris acuta, neque magnopere ſitiebant nec delirabant.—Sub ipſas acceſſiones oblivio, membrorum exolutio, et vocis defectio contingebant. His quidem pedes ſummi et manus frigidiores evadebant, multorumque maxime circa acceſſiones, deinde vero lente nec probe recaleſcebant*, rurſuſque ad intelligentiam redibant et loquebantur. Eos autem aut perpetuus ſopor non ſomnolentus detinebat, aut vigiliæ cum laboribus. Horum pleriſque alvus retrimentis crudis, tenuibus, multis turbabatur. Urinæ multæ, tenues, neque judicatorii quicquam eorum neque boni habebant. Neque aliud quicquam in ita affectis decernebat, neque enim rite ſanguis e naribus profluebat, neque aliud quicquam eorum quæ abſcedere nata ſunt judicatione tentabatur, moriebaturque unuſquiſque† uti fors ferebat*

‡ They muſt be far gone in error indeed and under the power of a ſtrong deluſion, who cannot underſtand that the blood, which in the ſacred writings is truly ſaid to be the life of Creatures, may get ſo impure by intemperance, as, with defect of ſtrength in the moving powers, but not through that deficiency alone, to put an end at length to animal motion, and prove mortal to all men.

§ Extraordinary comatoſe ſymptoms alſo attended the coming on of Fevers at Meſſina in 1784.

* Such laſting coldneſs was very extraordinary on the attack of Fevers in the years 1780 and 1783. See Notes in Pages 90 and 91.

† The yellow Fever under a peſtilential regulation was very mortal this year in the Weſt Indies, and at Charles-town in South Carolina, as it had been laſt year at Philadelphia.

vago

*vago et incerto ordine, p'ærunque circa judicationes*||, *quidam vero longius producti, cum vocis defectione, nonnulli etiam cum ſudoribus. Quæ quidem his qui pernicioſe haberent contingebant. Quin et ſimi'ia phreneticis fiebant. Atque hi omnes ſine ſiti erant. Neque phreneticorum quiſpiam vehementer inſanivit, ſicut in cæteris uſu venire ſolet, ſed ex mala alia quædam et languida in ſomnum degravatione graviter peribant.*,— A dreadful ſtate of Diſeaſes indeed! Exemplified, in regard of the fatality of ſome Fevers under violent peſtilential States, in the great mortality attendant on the yellow Fever at Philadelphia laſt year. A ſcene among many others in the preſent times, ſo full of miſery and diſtreſs, as muſt have greatly affected even thoſe who did not ſee it, who had not loſt the ideas of humanity and the ſentiments of compaſſion for the ſufferings of their fellow-creatures, and all the genuine feelings of the human heart.

|| This was the caſe with a very ſtrong Man: who after three relapſes, was affected with comatoſe ſymptoms attended with the greateſt weakneſs, during the criſis or diſcharge of the attenuated morbid humours which came away at this time plentifully in his urine. Under which circumſtances, incapable of bearing the force of and weathering ſo obſtinate and long continued a Diſorder, he gradually ſunk under it and dropped off.

A

# RECAPITULATION,

OR

## Obſervations on the preceding Pages.

ONE of the greateſt misfortunes that can befall men in the preſent ſtate, either as Individuals or in ſociety, is the want of the knowledge or of the love of the truth; whether this ariſes from intractability of mind that renders it averſe to knowledge, and almoſt as incapable of inſtruction as if a perſon were born an Ideot, or from pride and prejudice that blind the underſtanding; from natural incapacity, or a certain ſluggiſhneſs that enervates the ſoul, and hinders it from calling forth and exerting its proper powers. Many chuſing rather to take things upon truſt from others than be at the pains of examination: yet from hence aſſuming conſequence, thinking themſelves full, and having all the pride of learning, with little to boaſt of that is real and ſubſtantial, and heaping up pretended ſcience without meaſure till the mind is overborne. Such unfortunately has been too much the caſe with the ſtudy of the occult ſciences, and particularly that of Phyſic. And a mind thus overloaded with traſh, is like a ſtomach oppreſſed with groſs food which it cannot digeſt, and a body loaded with unaſſimilated juices and foul humours that it cannot throw off: the former as certainly bringing on the death of the mind in reſpect of ſublime knowledge, as the two latter do at length that of the body.

Nothing however is so apt to lead astray, and confound and bewilder weak minds, as that raging love of novelty, and spirit of scepticism, that are gone out into the world, and become so predominant in the present age. Certainly as rational beings we ought to believe that the foundations of learning were laid long before our own time; and that therefore, be the extent of our knowledge what it may, we are by no means at liberty to reject all that was before us. The wise man justly observed, in his own time, that there was nothing new under the sun: what vain phantoms and unreal images are men then hunting after? And as to disbelief and doubting of every thing, and withholding our assent beyond a due degree, it may be truly said to be the parent of ignorance; since without faith it is impossible to gain any true knowledge, much more in an eminent degree. Pride in themselves, as well as too much confidence in others, have also their share in misleading men in their enquiries after truth, and keeping them in ignorance, as well as want of diligence and application. True knowledge in religion, and also of the principles of obedience, and the necessity of paying it to legal power, is so excellent in itself, and of such consequence to the interests of mankind, and the peace of society, that he who is not sensible of the good effects of the former, is degenerate down to the nature of a Brute, and he who is not disposed to obey, unworthy of the protection of the Government he lives under. He also who does not believe in God, as he has revealed his own nature and mode of existence, cannot properly be said to believe in the true God at all, but is a kind of Idolater. Having however treated of these great branches of sublime science in the preliminary Dissertation, I shall go on to make some observations concerning obtaining true knowledge in Physic, the third great branch of it.

As to systems of Physic in general they have been changeable things, and till one is established on true observation, ever will be changing. As to the present system, a man might as well say that there is no blood in the vessels appointed to receive and carry it, as say that Disease is seated mostly if not wholly in the solids. The idea is idle, whimsical

fical, and imaginary; and would not deſerve a grave confutation, were it not reduced into practice, and productive of great miſchiefs. In obtaining phyſical knowledge in ſeminaries of learning, young men certainly ought to honour the Profeſſor's chair; but they are not obliged to adopt all his notions, nor to be followers of a leader and patronizer of a ſyſtem, or a former and propagator of opinions, for nothing is ſo fallible as the human mind, and the notions and reaſonings of men. And however ſtrange it may appear to ſome, there hardly ever was a time, wherein wild, and far-fetched opinions in natural philoſophy, were more indulged, nor more inconſiſtent and extravagant theories in Phyſic framed, than in this age of experiment, and even by ſceptics themſelves: ſhutting out the light of knowledge at ſome of its proper entrances, naturally producing ineffectual attempts to let in irregularly at others. Such things are not then to be taken upon truſt; they muſt be brought to ſome teſt; the infallible teſt of obſervation and experience, the ſtrict ſcrutiny of unprejudiced and exalted minds, and the ſevere and rigid examination of unbiaſſed reaſon.

Diſeaſes of the ſolids moſt undoubtedly there are: but ſo ſure as every particle of food we take in, has a principle of viſcidity or nouriſhment in it; ſo ſurely by an intemperate uſe either of ſolids or liquids, or both, will ſuch particles abound in the blood, and by not being well aſſimilated, nor duly carried off, under ſuch irregularity increaſe and accumulate, till they load the veſſels, and oppreſs the body, and by conſtant circulation, and the continued action of the ſolids upon them begin to acquire an heterogeneous and tenacious nature, obſervable enough in the blood taken from foul habits, in a ſizy and tenacious ſkin, or coat covering the coagulum, and in a yellow, viſcid and impure ſerum. Whence an indiſpoſition to free and due circulation; occaſioning, among other ill effects, the cold fits, and ſtrong tendencies to ſtagnation preceeding Fevers, as well as the increaſed circulation, and ſometimes violent Diſorders and efforts afterwards. But this is not all: viſcidity is always the parent of acrimony. And when the humours have at-

tained this ſtate of foulneſs, or a worſe, they, with other occaſional cauſes, become productive of Diſeaſes, and alſo lay the foundation of thoſe, which by being tranſmitted are hereditary, and generally on the increaſe. Now when under ſuch circumſtances, a peſtilential ſtate comes on, and diſſipates the finer juices, what muſt be the condition of thoſe bodies, be the ſolids weak or ſtrong, wherein ſuch foul humours abound? Properly ventilated the veſſels cannot be by Air, were that which is pure to be had, nor the impure juices diluted well by water, till ſome of them are evacuated, and their tenacious parts attenuated and diſcharged. Hence from violent action to ſupport life and motion, often neceſſarily conſequent to the above mentioned tendency to ſtagnation, and increaſed circulation ariſing from the ſtimulus of hot and putrid vapours, the heat, where there is ſtrength to ſupport ſuch action, frequently becomes exceſſive in ſome bodies, whilſt, when it is defective, corruption proceeds rapidly in others: and this, as far as it goes, is the caſe of thoſe in burning Fevers And when putridity does not come on ſo faſt, caſes of both kinds, eſpecially the latter, degenerating become long and obſtinate, when the foul humours are very vitious, and difficult of ſeparation. Often ending at length in mortal conſequences during the febrile efforts, when criſes are partially or totally defective, or through the dropſical tendencies, or other chronic Diſorders that follow them. Such a ſtate ſtands in direct oppoſition to a ſtate of health; which conſiſts in pure juices properly ventilated and diluted, and the ſtrength of firm and active ſolids, by good digeſtion, aſſimilation, ſecretion, and excretion ſupporting, through temperance and moderate exerciſe, an equilibrium, and regularity of circulation.

As to peſtilential conſtitutions, ſtrictly ſpeaking it is difficult to ſay, that for a long courſe of years back, nay perhaps even for ages, any ſingle year has been free at all times from a tendency to a peſtilential ſtate. For an Air that is capable of bringing on the ſmall Pox, meaſles, and chincough, though only locally, muſt be ſtrongly diſpoſed to be peſtilential, that is to produce peſtilential Diſorders; it being

being a weak notion void of all truth, that these always take their rise and procession merely from pre-existent infection*. This with regard to the two latter, is evident enough; the Air attendant on them being manifestly disposed to favour and promote the rise and progress of them, as in their origin at first; as is undoubtedly the case also, though in a manner not so observable, with respect to the Small Pox itself.

Though these Disorders however are evidently of the pestilential tribe, in order to shew clearly the nature of pestilential states, it will be necessary to draw a line of separation, and to distinguish them from those highly pestilential Diseases, the Scarlet Fever and Sore Throat, the Spotted Fever, with the violent burning Fevers, and other Disorders both acute and chronical attendant on them, which require a greater force of heat, and a stronger power of cold and moisture, and impurity of the atmosphere to bring them on, as is the case though in a much higher degree, with the plague itself.

Now in order to do this it will be necessary to observe, that all these violent pestilential Diseases are attended with such high inflammation, such intense heat, and such a degree of intolerable pain as gives them the nature of plagues—that, except in cases where a sudden dissolution of the humours happens, and death soon comes on, the blood generally is very sizy and tough in the beginning of violent pestilential Fevers, even so much so as sometimes to enable persons affected with them to bear large evacutions by bleeding, provided this be done on the very rise of the Disorder, before the putrid dissolution, that soon comes on in foul and loaded habits, takes place†; circumstances that do not happen

* How idle then must be the opinion, which supposes, that by the general practice of inoculation, the small-pox might be by degrees annihilated: since it is well known, that from the bad disposition of some bodies, the worst kinds of that Disorder will arise in them from the best matter, and the slightest degree of infection.

† Many cases however, I have already observed, would not bear the repe-

pen in ſuch putrid Fevers, as thoſe exiſting from about the year 1750 to that of 1778; wherein the blood was in general looſe in its texture, and its criſis broke, and the humours almoſt always in a ſtate of diſſolution from the attack of the Diſorder; going off haſtily in a putrid diarrhæa even in its beginning; and wherein therefore frequently the loſs only of a ſmall quantity of blood could not be borne— and, moreover, that by reaſon of this very impure and tenacious ſtate of the blood and humours, the latter are extremely difficult, and often wholly incapable of ſeparation; occaſioning hard and imperfect criſes, and the total want of them. Fevers from hence becoming lingering, ſlow, and obſtinate, and of long continuance, eſpecially in weak habits; diſpoſed to make tranſitions into, and produce other Diſorders attended ſtill with febrile efforts; and yeilding to nothing at laſt but a total diſſolution of the morbid matter, when nature has ſtrength to bring this about by external abſceſs in ſome of the beſt caſes, and by internal ones in the worſt; and degenerating at length into chronical Diſorders when conſtitutional ſtrength fails. So totally different are Diſeaſes thus circumſtanced, from thoſe happening in a pure air, and under an atmoſphere of a more benign, temperate, and regular nature, and ſo dreadful, grievouſly afflicting, and often mortal under peſtilential ſtates.

Now in treating of theſe, it is firſt to be obſerved, that peſtilential conſtitutions of all kinds naturally coming on, in general have had preparatory ſtates, not excepting that productive of the plague of Athens. The vaſt numbers

tition of bleeding under the preſent conſtitution, without manifeſt diſadvantage. The right uſe of it therefore requires a conſiderable degree of ſagacity in the Practitioner; a good knowledge of the nature of a caſe, and foreſight of what the Patient has to undergo, compared with the degree of ſtrength he has to carry him through it, and what will be the probable event of it. For in a long caſe, he who reduces the Patient too much in the beginning, acts not the part of a prudent Phyſician, as he thereby renders him incapable of weathering the Diſeaſe, and bearing up under a long Diſorder.

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crowded together in that city in the Summer, may indeed be juſtly conſidered as a great cauſe why that peſtilence raged in ſo peculiar a manner there. But there was a peſtilential ſtate of the air at that time, that had before this affected ſeveral countries; been in Perſia, Lybia and Egypt, and reported to have began in Ethiopia, before it gradually entered Greece, and this remarkable plague, from other concomitant cauſes, fell on a ſudden on Athens, as we are informed by Thucydides, who has given us an account of it. And moreover, he informs us alſo, with a degree of accuracy equal to that of a good medical writer, that the very year before it broke out, through a peculiar ſtate of the air no doubt, had been more than any other remarkably free from common Diſorders, and conſequently from their ſalutary efforts; and therefore diſpoſed to accumulate the matter, and hoard up the ſeeds of Diſeaſes, as was the caſe alſo under the putrid conſtitution preceeding the preſent; than which nothing is more inclined to increaſe the violence, and ill effects of conſequent or ſupervening peſtilential ſtates.

Three peculiar ſtates gradually increaſing in violence alſo preceeded the local peſtilential ſtate of Hippocrates, and are deſcribed by him in the firſt book of his Epidemicks. This circumſtance however, has not been well attended to by many of his commentators, nor the peculiar dependance on, and connection of the following ones with it ſhewn, nor that of the firſt and third with the ſecond. So far from it that Galen is ſaid to have diſputed the authenticity of the title to the third book. And our countryman *Friend* was ſo far from having any idea of this mutual connection and dependance, or that the Fevers deſcribed in the ſecond and third books were any other than common kinds of them, that he has ſelected the firſt and third and placed them before his Commentaries on Fevers, happening under a conſtitution of a quite different nature, thus confounding the whole. But whoever reads the preceeding pages with ability and attention, will find therein a deſcription, upon a larger ſcale, of the gradual approaches to,

and the breaking out and progreſs of a peſtilential ſtate, the plain ſubject matter of the Epidemicks of Hippocrates.

Peſtilential Conſtitutions likewiſe in general come on in the Summer, eſpecially in hot and dry ones*, and that at firſt locally: as was the caſe with regard to the breaking out of the Scarlet Fever and Sore Throat, and the appearance of burning Fevers and numbers of chronical Diſorders, in 1778. The peſtilential ſtate, which Hippocrates deſcribes alſo came on at firſt locally in the Summer. And though there were great rains in the beginning of it, there was an hot, dry, and foul air afterwards when fevers raged. After long continued hot and dry weather in Summer, there are generally large quantities of rain in the decline of the year; which, with ſucceeding heat in the Summer following, confirm the conſtitution, increaſe its power, and make it general. In the beginning of the preſent however

* It is remarkable that the firſt plague affecting human bodies, miraculouſly inflicted upon the Egyptians, was alſo brought on by an hot, dry, and foul ſtate of the atmoſphere, ſignified by both its cauſe and ſign, the ſcattering of aſhes of the furnace into the air, which, by divine creative power, became ſmall duſt in it, through all the land of Egypt. This plague being immediately preceeded by a murrain among the Cattle, as that in the Grecian Camp before Troy was, according to Homer's account, by a peſtilence among the Dogs and Mules. The boil with blains appearing to be akin to the carbuncle of Hippocrates; and alſo to the unſuppurating peſtilential boil, attended with a fiery redneſs and hardneſs, almoſt equal to that of a ſtone, requiring great length of time before it can be reſolved into matter; and accompanied with extreme pain, reſtleſsneſs, and ſlow fever, and frequently fatal; as well as to that of the putrefying and gangrenous kind. All of them, though that in Egypt was miraculous and extraordinarily violent, being the effect of an hot intemperature, wherein all natural healthful moiſture is evaporated and dried up; a ſimilar change, from the ſame cauſes, alſo taking place in the humours of the body; the finer parts of them being unduly diſſipated and carried off, and the remainder conſequently left in an heated, tenacious, and thickened ſtate, eſpecially in bodies loaded with foul ones.

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the drought continued through the Winter, and alſo the ſucceeding Summer, with ſuch an augmented force of heat as not only made it general, and increaſed the violence, and mortality of burning Fevers, but alſo connected them with a Dyſentery of the peſtilential kind, that deſtroyed many thouſands of the French and Spaniards, and appeared among us, in a very peculiar manner, in the cold and raw weather of the Winter afterwards.

Beſides the appearance of, and great mortality attendant on the Scarlet Fever and Sore Throat, and burning Fevers, at firſt locally in the hot Summer of 1778, and the general diffuſion of both through the kingdom, and much increaſed force of the latter in the ſtill more intemperate one of 1779, and their union with the peſtilential Dyſentery, there was under my own obſervation, an inſtance of a kind of peſtilential boil, attended with a ſlow Fever that proved mortal. And thus far the force of violent heat in two ſucceſſive Summers, was concerned in fixing the preſent peſtilential ſtate. But in and after the cold Winter following the latter, a quite different power became predominant in the atmoſphere; the Spring and Summer of 1780 being as uncommonly cold†, as the two preceeding Springs had been remarkably warm, and the Summers intemperately hot. *Et ſub anni declinatione ſuperveniebat autumnus obſcurus, nebuloſus, cum aquarum abundantia,* as in the peſtilential conſti-

† It perhaps may ſeem extraordinary, and appear a new kind of doctrine, to reckon cold among the cauſes of peſtilential ſtates. It is a fact however founded in obſervation and experience, and an accurate knowledge of the cauſes of Diſeaſe in general, that extreme cold is often concerned with heat in producing, and increaſing the violence of ſome peſtilential Diſorders. For nothing more compacts tenacious humours than its action, or increaſes their putridity than long retention and confinement by it. In the chincough, a diſeaſe that is brought on by, and always prevalent in a cold air, the effluvias of foul humours long retained under that Diſorder, will grow at length ſo ſo peſtilentially putrefactive, as to communicate it by the breath.

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tution of Hippocrates. Fevers becoming obſtinate, uncritical, and ſubject to relapſes, by the power of the former; and by that of both, attended with an uncommon degree of coldneſs, laſting ſometimes 3 or 4 days, on their attack, and extreme putridity in the termination of thoſe that ended fatally. The joint power of them ſtamping an image or ſtrong mark on Diſorders, obſervable in a remarkable heavineſs of the eyes in the Fevers of the riſing year 1781, that has been characteriſtic of them ever ſince.

After this obſcure, cloudy, and very wet Autumn, and great falls of ſnow in Winter, and much more rain in that ſeaſon and in Spring, there were great quantities through great Summer heats in 1781. Which with uncommon changes in, and a moſt variable ſtate of the atmoſphere, and a complication of all kinds of bad weather, raiſed Fevers to an high pitch indeed; there being alſo, through a very impure and diſſolved ſtate of the blood, diſcolorations ſometimes in rheumatic Diſorders even to blackneſs. Among multitudes of acute Diſeaſes the peſtilential Ague alſo made its appearance in the eaſtern parts of the kingdom, and was productive with others of a great mortality. There was alſo a great increaſe of conſumptive, dropſical, cancerous, and other chronic Diſorders—Thus after the ſevere cold of the Winter of the latter end of the year 1753 and beginning of 1754, and a continual ſucceſſion, according to the obſervations of Mr. White, of wet years from the latter to 1764 incluſive, which brought on and continued a ſtate, from the ſudden diſſolution of the humours in the beginning of Fevers that roſe in it, properly enough called putrid—After the very cold weather in February 1768, and that exceſſively cold and tempeſtuous in April 1770, and the large quantity of rain that fell in this and the following year, which raiſed theſe Diſorders near their greateſt height—After the ſtill greater quantities in 1774, and the ſevere weather in December following, and the exceſſive heat that began now to take place, and came on after it in the Summer of 1775; the extreme cold again of January 1776, which while it laſted almoſt equalled that in 1739—40, the Thermometer ſinking 2 degrees below Zero, and the

the hot Summer that again followed this, and particular the extreme coldneſs of the Summer of 1777, all of which were more immediately preparatory to the peſtilential conſtitution; and by compacting, heating and confining foul humours, that in ſome unhealthful bodies, had been accumulating during the putrid ſtate, rendered ſuch liable to be affected by it—After all this, I ſay, and by means of it, and ſucceeding great heat in the Summer of 1778, did the Diſorder called the ſcarlet Fever and ſore throat, break out locally in an hot town in the center of England, as a peſtilence of a different and more violent kind, did in the hot town of Cranon in Theſſaly, in the time of Hippocrates; and by the united powers of exceſſive heat, cold, and moiſture, was it increaſed and made general, and at length gradually confirmed. Preparatory ſtates we ſee this had and ſo had his. And the increaſed violence, and uncritical nature of Fevers, attended with great dejection of mind, in the laſt of the three ſtates he deſcribes, with the vaſt number of Diſorders, both acute and chronical, under it, were the natural forerunners, and ſad preſſages of it. His conſtitution alſo became general as this did: and ſo much of the riſe and confirmation of a peſtilential ſtate.

As there had been two extremely hot Summers together in 1778 and 1789, ſo was the obſcure and very wet Autumn repeated in the latter end of 1781, there being continual rains again through the Winter, and alſo larger quantities through Summer heats in 1782, than in the preceeding year. The hot weather however in this was often interrupted by returns of ſevere cold, the air having frequently great keenneſs even in warm weather. But the Spring in particular was ſo remarkably inclement, that it brought on a peſtilential influenza, or peculiar kind of plague, that ſpread on a ſudden through all Europe; being ſo exceedingly rapid in its progreſs, that millions of people were ill at once, and of ſo general and extraordinary a nature, as I believe, medical hiſtory hardly affords a parallel inſtance of. It was very fatal in the north of Europe, but not attended with any very conſiderable degree of preſent mortality with us; though it often laid the foundation for it in future

ture, great numbers dropping off in conſumptions brought on by it, and of other chronical Diſorders conſequent to it, in the decline of the year. This year and the laſt, tempeſtuous winds became very predominant: whereby the power of a cold, raw air was applied with much more force to the body, and had greater effects upon it. Which joined with the ill ones attendant on a moiſt, foul, ſtagnant and unwholeſome ſtate of the air in Autumn, ariſing from the vaſt quantity of rain that fell in the Summer, greatly increaſed the malignant nature, and deſtructive tendency of burning Fevers. Made them uncritical, and the tenacious humours ſo intractable, and difficult of diſcharge by the common outlets of the body, that impoſtumations began now to form in their decline; theſe and eruptions externally being the only ſalutary means that afforded nature relief in many caſes, and prevented their fatal termination.

Under theſe circumſtances of their increaſe, the cold weather in the beginning of the year 1783, raiſed them to ſuch an height, that Phrenſies came on in them. And in the hot and dry weather of the Spring and Summer afterwards, they became of a nature ſo uncritical, and the morbid humours ſo difficult of ſeperation, that from the irritation occaſioned by them, and the hot acrid vapours ariſing from them, there were ſeveral inſtances of a ſtrong tendency to Tetanus, and locked jaw in them: they being alſo often accompanied with other uncommon ſymptoms, and horrid terrors. Alſo when the rains fell, after the remarkable hazy atmoſphere, that obſcured the ſun in the beginning of Summer, burning Fevers attended with Diarrhæas, and the Dyſentery, became epidemical through the kingdom, as they had before this fell on the French and Spaniſh Fleets, when they lay before Plymouth, in 1779.

The extreme ſeverity of the Spring of 1784 brought the peſtilential Ague, which had before raged in the eaſtern parts of England, into, and made it epidemic in the center of it: burning Fevers with rheumatic Diſorders, affection of the head, lungs, and bowels, and all the other tribes of Diſeaſes, that aroſe in and ſince the year 1778, accompanying

nying them, and not even the ſcarlet Fever, nor any other diſorder, having even gone wholly off.

In the cold, foul, variable, and ſometimes hot and cloſe weather in the Spring, and moiſt, ſtagnant Air in the Summer of 1785, agues, intermittent, and continual Fevers were reduced into a ſtill worſe ſtate. The latter being attended with great languor, and dejection of ſpirits, and very fatal in cloſe ſituations, and large Towns, and the two former ſo increaſed in violence, as often to have fatal terminations; the morbid humours having, through the power, and continuance of the peſtilential ſtate, acquired ſo great a degree of tenacity, as not to be ſeparable frequently but by the glands of the bowels.—And in the latter end of the year, burning Fevers with Diarrhæas and the dyſentery, were very fatal. Great numbers of Diſorders accompanying the conſtitution of this year, under an increaſed degree of violence and malignity; and people on their attack, being ſometimes ſubject to violent hæmorrhages, from the great accumulation, and high rarefaction of the foul humours, and to relapſes, from their vitious nature and want of diſcharge. Sudden deaths were alſo among the other unfriendly and violent effects of this dreadful ſtate.

The intemperature and ill effects of 1786 were ſimilar to thoſe of the preceeding one, under a ſtill increaſed degree of violence; burning Fevers being now often attended with phrenetic ſymptoms, and not going off without impoſtumations in their decline, as was the caſe likewiſe, in ſome inſtances, the preceeding year.

As to the conſtitution of 1787, conſiſting chiefly of moſt foul, raw, wet, warm, and cloſe weather, for the moſt part out of the South, with frequent interruptions from cold, and a moſt variable ſtate of the atmoſphere, Diſorders, ariſing in it not only acquired a greater degree of violence, but began to follow one another in ſuch quick ſucceſſion, as to ſeem complicated together. Burning Fevers in particular, being now very general, and frequently accompanied not only with external diſcoloration, but gangrenes; and being

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not only in these but other bad cases, often suddenly and unexpectedly mortal. Others ending not only in outward but inward impostumations, in some instances, among those that recovered, many of the pulmonic kind however terminating in a confirmed tabes. Many dropsies also were brought on by this foul and moist intemperature.

In 1788, the severity, dryness, and harshness of the Spring, the very hot or cold, wet, and mixed weather in Summer, and the great variableness of the air, raised burning Fevers to so great an height, that the head was often attacked in them with violent Phrenitis. The vitiated state of foul humours in the blood, confirmed by this intemperate condition of the atmosphere, and the great accumulation of them from the variable state of it, undoubtedly brought them to this pitch of violence; the bodies of those who were thus attacked, being so oppressed by a retained load of foul humours, that before this extraordinary affection of the brain came on, they were usually seized with violent pain attended with obstructions in the bowels, and sometimes diarrhæas, upon the very rise of these Fevers. Most of these causes came on in the decline of the heat of Summer, and coming on of a cooler state of the air in Autumn, when the rarefied humours became more confined, and also disposed to putrefaction. The difficulty of their discharge by the subsequent efforts of Fevers, where great part of them was not prudently carried off by the bowels in the beginning, rendering them not only in this manner violent, but by reason of the coming on of the cold weather in Winter, in some cases also very lingering and obstinate.

The year 1789, by its inclement coldness, and intemperately dry or wet, and very variable state, was peculiarly remarkable for relapses, or returns of Fevers, taken notice of by Hippocrates long ago, as well as for the number of Apoplexies that happened in it, and instances of sudden death, even among young persons. In the moist, foul, open, and stagnant state of the air in Autumn, and Winter, the measles

fies alſo became epidemical, and uncommonly fatal in cloſe, large towns among children.

In the cold, tempeſtuous, and wet weather, and foul, and ſometimes ſtagnant ſtate of the Air in the Spring, and Summer of 1790, the Influenza and Chincough were prevalent, and burning Fevers were attended, even in theſe early ſeaſons of the year, with Diarrhœas, high putreſcence, and great debility and lowneſs of Spirits. And in the very wet, changeable, and open weather of the ſucceeding Winter, the ſmall Pox of a bad kind were epidemical through the kingdom, and attended with great mortality, as the meaſles had been in ſuch kind of weather in that preceeding.

In the inclement, raw, tempeſtuous, wet, mixed and very variable weather in 1791, burning Fevers appeared in a ſtill more malignant form; being attended with grievous ſickneſs at the ſtomach on their attack, and accompanied with the ſore Throat, delirium, phrenzy, and a train of bad ſymptoms; inflammations in the viſcera often ending in impoſtumes, as tumors formed on the ſurface of the body had ſome years ago in external ones, the foul humours being now determined in Fevers to the internal parts inſtead of the outward. The ſcarlet Fever and ſore Throat alſo was epidemical in ſeveral places, even in the Winter, and alſo the dyſentery. There were alſo many apoplexies and inſtances of ſudden death, under this very inclement and changeable ſtate.

In the year 1792 there was a ſtill farther increaſe of the coldneſs, wetneſs, and tempeſtuous ſtate of the weather, and changeableneſs in the atmoſphere; the decline of it being alſo moſt uncommonly foul. In conſequence whereof, after a dreadful chincough in the Winter, fatal to numbers of children in ſeveral parts of the kingdom, the burning Fevers of the riſing year were often attended with phrenſies, and frequently mortal; the tendency to ſtagnation in the foul humours being ſo great on their attack, that ſome perſons were affected with a ſenſe of coldneſs laſting for ſeveral days. The ſcarlet Fever and ſore Throat alſo broke

out

out in a violent manner, as on its rife in 1778, and there was fo bad a return of the Influenza in the Autumn, as to prove fatal to many. Among the ill effects of this conftitution many died fuddenly, as in fome years of late, their bodies being in a ftate of high putrefaction foon after death. And among other chronical Diforders attendant on it, were obftinate jaundices, confumptions in perfons of all ages, and numerous inftances of infanity.

The dreadful year 1793 was preceeded by an open Winter as the laft; but the weather in it was raw, tempeftuous and wet, a cold, raw, and very variable, and foul ftate of the atmofphere going on through the Spring and beginning of Summer; and after this fuch great and continued heat coming on fuddenly, as had not been known in the memory of man. There being in the decline of the year, uncommonly warm and dry weather the following Autumn; though after large quantities of rain, which at length fell, the Air was cool, foul, and moift, in the Winter afterwards.

In confequence of this inclement, and wet weather, foul and variable ftate of the atmofphere, in the beginning of the year, burning Fevers came on with increafed violence foon after the Winter folftice; being frequently attended with phrenfies, and often foon mortal, efpecially thofe accompanied with inflammation of the lungs, and to children, among whom they were in a peculiar manner epidemical; being frequently attended with the fore Throat, as the fcarlet Fever, and bad ulcerations in the mouth. The Chincough and Influenza were alfo prevalent with them; and that fatal Diforder the Croop, made its appearance. Obftinate Jaundices accompanied this inclement ftate of the Winter and Spring, and other chronic Diforders of the liver and ftomach. Some had large internal hæmorrhages; there were alfo many confumptions, and numerous inftances of fudden death. Extraordinary degrees of ftagnation began now to take place: a fatal inftance of one externally feated, attended with an high degree of corruption before death, I have related: and fuch was the ftate of Diſeaſes

caſes during the inclement ſtate.—When the intemperate heat came on, it was ſo great, that ſeveral Perſons dropped down dead in the fields at work; and the meaſles became on a ſudden, very epidemical, and ſpread with great rapidity in ſome places; being followed by violent Fevers accompanied with inflammation of the lungs, and violent attacks upon the head, that were fatal to ſome, and hung on long in others. But theſe things were ſmall, compared with the dreadful effects of the violent peſtilential conſtitution of this year in the weſtern parts of the world, where under ſuch a regulation, the yellow Fever was attended with a very great mortality.

In the Spring of 1794, the weather was firſt very wet, then very cold and variable; in the beginning and middle of Summer very dry, and in the latter intemperately hot, though not in ſo great a degree as laſt year; and in the end of it and the Autumn, cloudy, exceſſively wet, tempeſtuous, obſcure, gloomy, and foul, there being a kind of repetition of *autumnus obſcurus*, &c. the Fevers through the whole year being obſtinate, ſlow, and ill-conditioned, and ſubject to frequent relapſes. In the Spring the Influenza returned, the Scarlet Fever and Sore Throat, Small Pox, and Meaſles, being alſo prevalent, as in the preceeding ſeaſon, the Winter, and there being many apoplexies, total ſtagnations and ſudden deaths, both in this ſeaſon and through all the year.—In the heat of Summer, Fevers were ſtill more malignant and mortal; being frequently accompanied with the Sore Throat as the Scarlet Fever, and ſubject to the ſame dropſical tendency afterwards. And when the rains fell in the latter end of it, they were attended with ſuch putrid diarrhæas, that the ſtools were often quite black; Diſorders alſo very common without them, as well as obſtinate Jaundices, and other bad Diſorders of the liver and ſtomach. Slow Fevers were now attended with uncommon weakneſs and lowneſs; and there were not only ſuch, but alſo violent ones with phrenzy. The Influenza returned again at this time, and alſo the Croop: and ſomewhat later not only diarrhæas were epidemical, but alſo the dyſentery in ſome parts of the kingdom.—In the Autumn the Scarlet Fever and Sore Throat appeared again, and Fevers of all kinds, in this very wet ſeaſon, were ſometimes

attended with an uncommon ſenſe of coldneſs through the whole Diſorder; but nothing was ſo remarkable this year, as their ſluggiſh nature in general, and the want of proper action in them. At this time Diſeaſes were ſo mortal at Hull, eſpecially the Scarlet Fever and Sore Throat among Children, that by accounts in the Papers, above an 100 of the latter died in the ſpace of a month*. Such was the very extraordinary, unfavourable, and even fatal ſtate of them with us: but the force of the violent peſtilential conſtitution of this year, fell chiefly on the weſtern parts of the world; where the Yellow Fever, under ſuch a regulation, brought on again a very great mortality. But in the more intemperate and fatal one of 1793, beſides what happened at Philadelphia, we learn that a Fever ſimilar to it in all reſpects, deſtroyed in the province of Yucatan, belonging to the Spaniards, 50,000 Perſons.

Thus after a curſory review of the principal parts of the foregoing deſcription of the ſtate of the atmoſphere, and its effects, in the ſeveral ſucceſſive years of the preſent peſtilential conſtitution, we not only ſee its riſe, but are able to take in, as it were at one view, and mark its gradual progreſs, variations, and increaſe, from its beginning to the preſent time. Nor if we have any obſervation or reaſon in us, can we be ignorant thus informed and led on, that intemperate heat diſſipates the finer juices, and thickens and renders ſizy viſcid, unaſſimilated humours in the blood, nor that inclement cold compacts and confines them; nor that tempeſtuous winds apply the power of both, with greater force to the body, increaſing thus their ill effects; nor that a moiſt, warm ſultry, and ſtagnant air, makes ſuch heterogeneous fluids, rarefied by heat, and confined in the veſſels by cold, diſpoſed to corruption. Let be remembered ever then this truth great in phyſic, that a peſtilential conſtitution renders a viſcid lentor acquired by intemperance, and taking in more than the digeſtive faculties can duly prepare, and the power of the veſſels ſanguify, thus tenacious, and makes hereditary ſcorbutic matter of a ſimilar but worſe nature, that was acquired in preceding generations originally in the ſame way, ſtill more tenacious and

* There were many bad puerperary Fevers this year, one of which was fatal, and another nearly proving ſo. Many Dropſies alſo aroſe, both in children and old perſons, during the inclement weather in the beginning of the year 1795.

inſeperable

inſeperable by the power of acute diſeaſes from the body. Giving it when accumulated with other more recent groſs humours in the veſſels, under weak and relaxed corporeal powers, from natural or acquired imperfection, or from impurity of the animal ſpirits and morbid vapours infeſting the nerves, not capable of making ſtrong efforts, circumſtances ſometimes attendant on the attack of Diſorders, but common to the latter end of them, a ſtrong tendency to ſtagnation and corruption, when it cannot be duly diſcharged, whereby Diſeaſes become ſuddenly or at length fatal; as they do alſo from ſuch impurity undiſcharged by by more violent efforts in ſtronger ſubjects. Bringing on thus, as I have ſaid, a very ſizy and tenacious ſtate of part of the coagulum of the blood, obſervable in it when cold, and a moſt viſcid, acrid, and impure ſtate of the ſerous and lymphatic humours; and when the impure humours are by degrees more incorporated with the ſounder parts of the blood, inſeperability from them; whence not only its ſtagnation within, but eruption out of the veſſels in hæmorrhage, and a moſt corruptible ſtate of it: matters in the ordinary courſe of things, chiefly incident to old age alone, and the retention of ſuch foul humours in the veſſels, and their long-continued action on them. Nor let this truth likewiſe ever eſcape the memory, which the commentator on Hippocrates Galen, Friend our own countryman, and many others have been ſo unapt to find out and receive; namely that the effect of a more moderate peſtilential conſtitution is that of making all Diſorders peſtilential ones, they, though greatly increaſed in violence and malignity, ſtill retaining in a great meaſure, if not wholly, their uſual types and forms. And that it is the nature of a more violent and ſtrongly peſtilential one to ſwallow up as it were, the whole tribe of other Diſeaſes at once*, and bring in the Plague itſelf in lieu of them. Though if we may ſafely depend on the bills of mortality, ſome are ſaid to have died of ſpotted Fevers and other Diſorders, even during the great Plague of London itſelf.

* See Thucydides's account of the Plague of Athens.

In the preceeding Pages lye the ſubſtantial principles and great parts of Phyſic, placed in ſo conſpicuous a point of view, that every man of diſcernment muſt ſee, that the nature and condition of Diſeaſes agree to a tittle with the ſeveral conſtitutions deſcribed, and every particular ſtate of them, not only as they regard obſervation as laid down by Hippocrates, but alſo as they reſpect the fundamental and greater knowledge of the original cauſes of Diſorders, as ariſing from, and dependant on impurity of the blood and juices, and defect of the ſtrength of the ſolids general or particular So that though theſe principles at times inculcated, are not connected together in one regular ſyſtem, yet both they, and the practical and other remarks made, correſpond ſo perfectly with the phœnomena obſerved, and are diſtinguiſhed by ſuch legible characters, that he who runs may read them. What the ſupreme diſpoſer of things has been pleaſed to permit was undoubtedly moſt fit and proper, and the wiſeſt and the beſt. That the knowledge of the nature of peſtilential Diſeaſes and their cauſes however ſhould have lain involved in ſuch obſcurity for ſo many ages, notwithſtanding the light let into this great part of phyſic with ſuch luſtre by the writings of Hippocrates, muſt ever appear extraordinary to a thoughtful mind; and may juſtly be conſidered as the due puniſhment of that vanity and intractability, that raging love of novelty, and eager deſire of worldly intereſt, which lay ſuch ſtrong hold of, and ſo infatuate the minds of many; as well as of the want of ſteadineſs, diligence, and perſeverance in the purſuit of thoſe nobler objects, that appear worthy of mens attention, and to deſerve a more than common ſhare of their notice and regard. Some indeed there are who muſt be led on, and urged forward, and others that want governing and fixing to a point: in whom the mind is too volatile, and apt to launch out into extravagant, and wild conjectures, to grow eccentric, and ſet no bounds to its imaginations, eſpecially when through reading bad books, and indulging erroneous and wrong ideas, it is got from home, and its native ſimplicity has been loſt. Let us however follow the example of theſe generous ſpirits who are able to think, and not only can but will exert themſelves; not be amuſed with trifles, nor perſuaded to ſit down contented with vulgar

gar and mean attainments, but ſeek truth where ſhe may be found, and rejoyce in the love of knowledge; elſe how can we expect to follow her in her progreſſive ſteps, or trace her in her high flights, till we by degrees arrive at the ſublime paths of ſcience? It is not becauſe her ways are difficult, but becauſe men will not uſe due pains, do not exert themſelves, nor are ſteady in their purſuit, that they have not been able to follow her, but have often turned in their courſe retrograde.—Let us all then cheriſh the love of the truth in our ſouls, and beware of the pride of ſyſtem; which unaided by the force of obſervation, that faithful guide to rational deduction, has led many aſtray, and made them deſert the right path; laid a ſtumbling block in the way of knowledge, and barred up the avenues that lead to true phyſic.

In the infancy of phyſic Hippocrates manifeſtly was endued with uncommon powers, and had extraordinary qualifications, to anſwer the wiſeſt and moſt benevolent purpoſes. His name has been had in honour through all generations by all men of true knowledge, and the world always was, and ever will be indebted to him and his writings. The preſent too general neglect of the ſtudy of them has had pernicious effects on medicine, and paying proper attention to them would infallibly rectify the errors of modern phyſic. They have ſtood the teſt of all ages, and have ever been conſidered as the ſtandard of true obſervation, accurate deſcription, and juſt prognoſtication; a character they have uniformly maintained and ever will poſſeſs to the end of time. Any oblique inſinuation then, or more open attempt to bring them into diſcredit, ought juſtly to be held in abhorrence: and muſt ever be conſidered by every friend to truth, and lover of learning and knowledge, as one of the vaineſt efforts that arrogance ever attempted, or the ignorance and folly of an infatuated and degenerate mind ever conceived, nay as bordering on a kind of profanation. But alas! What have not ignorance, pride, envy and malevolence ſaid and done againſt the greateſt benefactors of mankind? His prognoſticks have juſtly acquired the title of a work divine. In them, his epidemicks, and other writings, there is ſuch depth of ſagacity and ſolidity of judgement, and maſterly ſtrength and

preciſion, as have been ſeldom equalled, and with powers ſhort of inſpiration, perhaps never excelled.

If then there be ſuch a thing as ancient medicine, if any truth in the obſervations of Hippocrates, and the beſt Phyſicians that have ſucceeded him, about critical diſcharges, and the benefits ariſing from them when perfect, or concerning the tranſition of Fevers into other Diſorders, and their termination in mortal conſequences when they are defective and void—if there be, I ſay, ſuch things as intemperance and impurity of the blood and humours, let us not reject ſubſtantial knowledge of theſe things, and ſacrifice the welfare of our patients to an idle notion, and vain imagination; to a novel and heterogeneous opinion that the ſeat of Diſeaſes lies chiefly, if not wholly in the ſolids: a wild, far-fetched, and extravagant conceit, that will not agree with the Phœnomena obſerved! A mere dream, that has no exiſtence but in the fanciful brains of thoſe who have imagined it!—If we be men, I ſay, then let us act as ſuch; and take up the rational and judicious part: not ſuffer ourſelves to be deluded by the airy phantoms, and creations of a day, that will not however bear the light, but after fluttering about for a while, muſt in a ſhort time utterly periſh, and be for ever buried in the obſcurity of that darkneſs in which they were formed. Let it not be imagined however that I blame any one for inſiſting that there are Diſeaſes of the ſolids; no, it is for carrying that matter too far, to the utter neglect of the ſtudy and knowledge, nay to the total excluſion, as it were, of all belief of Diſeaſe in the fluids, putting thus a part, and that much the leſſer part for the whole. If the foundations of phyſic are thus broken up, and its principles ſubverted, the whole art muſt fall into ruin with them; become like a deſolate and uninhabited country, wherein the known land marks are removed, and every thing lies in confuſion and Diſorder. Let as much true phyſic be added to the preſent ſtock as may be, but let there be no taking away from that which is ancient and eſtabliſhed, and has ſtood the teſt of ages. It has ever been the bane of phyſic, that thoſe who have ſtudied it have not had patience and perſeverance to proceed from things known to thoſe which were unknown, but ever and anon ſome enterpriſing genius's have ſtarted up, and

and ſet about ſpinning and framing fine ſyſtems out of their own productive brains, which being inconſiſtent with obſervation, have all dwindled away, and been laid aſide in their turns. This however, I need not ſay, is not the way to arrive at the full knowledge of ſo abſtruſe a ſcience as that of phyſic; experience has ſhown its fallacy, and the trial of all ages. Whatever degree of irritation, ſpaſm, or even convulſive effort itſelf at any time comes on, ariſes chiefly from oppreſſion and diſtenſion of the veſſels by a load of viſcid humours, or the ſtimuli of thoſe that are hot, impure, acrid, or peſtilential; eſpecially when acting upon ſolids often originally weak, or by reaſon of age or ſex naturally lax and delicate, and therefore diſpoſed to accumulate impure humours, and alſo leſs capable of bearing well their ill impreſſion; whence children, young people, and women, are moſt ſubject to nervous and convulſive diſorders. Even when the miſchief lies deep, and is ſeated in the intimate receſſes of the nervous ſyſtem itſelf, the effluvia of foul humours, and impure animal ſpirits, are often, nay almoſt always, radically at the bottom of the diſeaſe, even when the ſolids themſelves are in an irritable ſtate, and concerned in increaſing thoſe extraordinary diſturbances that ariſe in it; and this even in thoſe very caſes, wherein convulſions come on from wounds, and other accidents, as I could infallibly ſhew from the efforts of nature, the phœnomena obſerved, and relief obtained from medicine, in ſuch caſes of them as are related, or that I have ſeen or heard of.

If this were not the caſe, why has ſubſtantial relief been received from the uſe of mercurials and the diſcharge of foul humours by ſalivation, or after moſt violent efforts, a ceſſation of convulſion come on upon the appearance of an eryſipelas, or eruptions on the ſkin, in caſes of Tetanus? Such Diſorders do not ariſe in bodies that are pure, ſince none are ſo; and the irritation that comes on muſt have a cauſe; and that cauſe, even in wounds, as far as I am able to trace it, is not merely the wound of a nervous part, but the impurity of the juices, and the want of that balſamic, and wholeſome moiſture, abounding in the bodies of thoſe who are moſt healthful, by means of which the nerves are moiſtened and defended, and whereby the body is in a condition to relieve itſelf when under a ſtate of irritation, by the diſcharge, and in particular by free perſpiration, of what might otherwiſe oppreſs or irritate the conſtitution,

and

and not only bring on ſpaſms, but contribute to the continuance and increaſe of them, as muſt happen in thoſe of oppreſſed and foul habits, in whom that diſcharge is greatly defective.

Before I leave theſe ſubjects ſuffer me to give this uſeful intimation, that if men would leave off travelling like the Pack-horſe, always with one dull pace in the ſame wrong road, and laying aſide that mode of living which oppreſſes their bodies, and ſhaking off that ſloth which enervates their ſouls, and makes them ſtupid and heavy, and torpid as drones, be perſuaded to preſs forward with patience, perſeverance, and alſo proper activity in a right one; if they alſo could keep their minds from growing excentric and ungovernable, and being led away by prejudice, or corrupted by ſophiſtry, and rendered uſeleſs by ſcepticiſm, there is nothing in nature ſo abſtruſe, which is the means of any ſubſtantial good to men, which the benevolent Creator has not furniſhed them with proper powers to inveſtigate and underſtand, ſo far as may be neceſſary, if they uſed thoſe powers in a proper manner, and with induſtry and application, and could diveſt themſelves withal of that fatal prepoſſeſſion of mind, ariſing from reading indifferent books, which has ſtood as an obſtacle in the way of ſo many; namely, the taking ſo much for learning, that has no juſt title to it, and be perſuaded to lay aſide whimſical notions, and the vain pomp of an affected, oſtentatious, but too often unſound knowledge. For it does not appear that the Almighty author of all knowledge, will condeſcend to impart that of a ſublime kind, where true humility and the love of it are wanting, or diſplay the truth, his own image, to the view of any, but thoſe who unfeignedly and ardently ſeek her in ſimplicity of mind.

Without this friendly ſtar to enlighten them on the way---without this faithful guide to direct their erring ſteps, miſerable are the wanderings of poor benighted mortals, and many the misfortunes that attend them in their journey through this vale of tears.

With the utmoſt lowlineſs and humility, then, let me now offer up theſe my imperfect labours for the good of my fellow-creatures, to whom, ſhould they eſcape the wrecks of time, I leave them for a perpetual poſſeſſion, to that great Being from whom all good proceeds, and in, and through whom this work was began, continued and at length finiſhed.

*Gloria Deo in excelſis!*